Exhibit 4

PLAINTIFFS' RESPONSE TO DEFENDANTS' MOTION TO EXCLUDE GENERAL CAUSATION TESTIMONY OF PLAINTIFFS' EXPERTS

UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF CALIFORNIA

IN RE: SOCIAL MEDIA ADOLESCENT ADDICTION/PERSONAL INJURY PRODUCTS LIABILITY LITIGATION	Case No. 4:22-MD-03047-YGR MDL No. 3047
This document Relates to: ALL ACTIONS	

CONFIDENTIAL

VIDEOTAPED DEPOSITION OF BRADLEY ZICHERMAN, MD
PALO ALTO, CALIFORNIA
AUGUST 27, 2025
9:16 A.M.

Job No. MDLG7553548
Stenographically reported by:
JENNY L. GRIFFIN, RMR, CSR, CRR, CCRR, CRC
CSR No. 3969

Videotaped deposition of BRADLEY ZICHERMAN, MD, taken on behalf of the Plaintiffs, at Covington & Burling LLP, 3000 El Camino Real, Palo Alto, California, on Wednesday, August 27, 2025, beginning at 9:16 a.m. and ending at 7:16 p.m., before Jenny L. Griffin, a Certified Shorthand Reporter, Registered Merit Reporter, Certified Realtime Reporter, California Certified Realtime Reporter, Certified Realtime Captioner.

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C O N T E N T S

E X H I B I T S
(Attached to Transcript)

E X H I B I T S C O N T I N U E D

E X H I B I T S C O N T I N U E D

E X H I B I T S C O N T I N U E D

E X H I B I T S C O N T I N U E D

REQUESTED MARKED BY MS. BARNHART

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DIRECTION TO WITNESS NOT TO ANSWER

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P R O C E E D I N G S

THE VIDEOGRAPHER: We are now on the record. My name is Tommy Madueña. I am a videographer for Golkow, a Veritext division.

Today's date is August 27th, 2025, and the time is 9:16 a.m. This video deposition is being held in 3000 El Camino Real, Palo Alto Square, Palo Alto, California 94306 in the matter of Social Media Adolescent Addiction/Personal Injury Products for the United States District Court, Northern District of California.

The deponent is Dr. Bradley Zicherman.

Will all counsel present in person please identify themselves, beginning with the noticing attorney.

MS. BARNHART: Lindsey Barnhart, Covington & Burling, on behalf of Meta. I'm joined by my colleagues Isaac LaGrand and Dominic Booth.

MS. O'NEILL: Megan O'Neill for the People of the State of California.

MS. ARORA: Nayha Arora for the People of the State of California.

MS. SERALATHAN: Meena Seralathan on behalf of the Commonwealth of Massachusetts Attorney General's Office.

THE VIDEOGRAPHER: The court reporter is Jenny Griffin, and will now swear in the witness.

THE STENOGRAPHER: My name is Jenny Griffin. My CSR number is 3969.

- - -

BRADLEY ZICHERMAN, MD,

having been first duly sworn and/or affirmed by the Certified Shorthand Reporter to tell the truth, the whole truth, and nothing but the truth, testified as follows:

EXAMINATION

BY MS. BARNHART:

Q. Good morning, Dr. Zicherman.

A. Good morning.

Q. I'm -- we just met. I'm Lindsay Barnhart here on behalf of Meta. Thank you for being here today.

Have you ever been deposed before?

A. I have not.

Q. Okay. So I'll go over quickly some ground rules. As you know, the court reporter is taking a transcript of today's proceeding. And in order for her to receive an accurate transcript, I'll ask that you provide verbal answers to my questions. So no nodding of your head or shaking of your head.

A. Understood.

Q. Okay. Also, in the interests of having an accurate record, can you agree that we won't talk over each other, meaning I'll finish my questions before you answer and vice versa?

A. Sure.

Q. Okay. Unless you say otherwise, I'm going to assume you understand my questions.

Is that fair?

A. That's fair.

Q. All right. If at any point you need a break, that's totally fine. Just let me know. All I'd ask is, if there's a question pending, you answer that question before we take a break.

Sounds good?

A. Okay. Yep.

Q. Okay. You understand that you're here today to testify about the expert reports that you submitted in a lawsuit brought by several state attorneys general?

A. I do.

Q. And that lawsuit that you're here today for is pending in federal court in Oakland; correct?

A. Yes. That is my understanding.

Q. All right. And what's your understanding

of the allegations in that lawsuit?

A. I would like to reference my report to fully answer that. Will that be okay?

Q. You don't have a separate understanding of the allegations in the lawsuit?

A. Well, I do, but I want to answer this accurately.

Q. Okay. Well, we're not going to spend time looking through your report. I'm just -- you don't have an understanding separate and apart from your report; is that correct?

MS. O'NEILL: Objection. Mischaracterizes his testimony.

THE WITNESS: I have an understanding, but in order to accurately --

BY MS. BARNHART:

Q. Well, what's that understanding?

A. In order to accurately answer the question, I would like to refer to the report.

Q. This is going to be a really, really long day if we're flipping through your report for basic questions like this.

So all I'm asking is, separate and apart from what's in your report, what's your understanding of the allegations in the lawsuit?

MS. O'NEILL: And I'll just say he's entitled to look at the report if he needs to.

THE WITNESS: Okay. Well, then I would like to look at my report to fully answer the question.

BY MS. BARNHART:

Q. I'm not asking about what's in your report; I'm asking about your understanding separate and apart from what's in the report.

Do you have such an understanding?

A. I have an understanding; but, again, I would like to fully and accurately answer the question.

Q. Okay. Just tell me what your understanding is separate and apart from your report.

You can answer that without looking at your report.

A. I would choose to answer the question looking at my report.

Q. I'm not asking you what's in your report; I'm asking you what is your understanding separate and apart from what's in your report of the allegations in the lawsuit.

Are you going to answer the question?

A. Well, I would like to answer the question

by looking at my report.
Q. I'm not asking you what's in your report, Dr. Zicherman.
Do you understand my question?
What is your understanding, separate and apart from what the lawyers have written for you in your report, of what the allegations in this lawsuit are?
MS. O'NEILL: Objection. Mischaracterization. Argumentative. Form.
THE WITNESS: If you would like an answer that is accurate, without me misspeaking, misrepresenting anything involved in the case, a technical point, I would like to look at my report to answer that.
BY MS. BARNHART:
Q. So I'm going to understand from that nonresponse that you do not have an understanding, separate and apart from what's in your report, of the allegations in the lawsuit; is that right?
MS. O'NEILL: Objection. Mischaracterization.
THE WITNESS: I have an understanding. To accurately answer the question, I would like to reference the report.

BY MS. BARNHART:
Q. So that made no sense. You have no understanding -- without looking at your report, you can't answer the question; is that true?
MS. O'NEILL: Objection --
(Stenographer interrupted for clarification of the record.)
THE STENOGRAPHER: Ms. Barnhart, your question was: So that made no sense. You have no understanding without looking at your report" --
BY MS. BARNHART:
Q. -- of what the allegations in the lawsuit are; is that true?
MS. O'NEILL: Objection. Mischaracterization. Argumentative.
THE WITNESS: I would again prefer to look at the report to answer the question accurately.
MS. O'NEILL: He's entitled --
BY MS. BARNHART:
Q. That's not my question.
MS. O'NEILL: He's entitled to look at the report --
BY MS. BARNHART:
Q. My question --
MS. O'NEILL: -- to help answer the

question.
BY MS. BARNHART:
Q. And my question for you is, without looking at your report, can you or can you not provide me an understanding of your allegations -- understanding of the allegations in this lawsuit?
A. And I would prefer to answer the question accurately by looking at my report.
Q. That's not my question.
My question is can you or can you not answer the question without looking at your report? It's a yes or no.
A. Well, I don't believe that's a yes-or-no question.
Q. So you cannot answer my question without looking at the report. That's what you're saying?
MS. O'NEILL: Objection. Mischaracterization.
THE WITNESS: I can answer it accurately by looking at my report.
BY MS. BARNHART:
Q. Can you answer the question at all without looking at your report?
A. I can answer the question most accurately by looking at my report.

Q. Do you understand that's not my question?
I'm asking can you answer what your understanding of the allegations in this lawsuit is without looking at your report? If the answer is no --
A. I'm sorry. I find your question confusing at this point.
Q. Right, because you're not listening to it.
My question is, without looking at the report, can you answer my question of what is your understanding of the allegations in this lawsuit?
A. Well, I can answer it; but I would want to be as accurate as possible. In order to do that, I would need to reference my report.
Q. So you're not going to answer that question for me without looking at your report?
A. I believe I have answered the question.
Q. No. This is a new question.
You are not going to answer my question without looking at the report; is that fair?
MS. O'NEILL: Objection. Argumentative.
THE WITNESS: Again, I'm a little confused by your question at this point. I'm sorry.
BY MS. BARNHART:
Q. My question is do you have any

understanding of what the allegations are in this lawsuit?

A. Of course I have an understanding of the allegations.

Q. But you are not willing to share that understanding with me without looking at your report; is that correct?

A. Well, I think there are likely technical points related to your question. And in order to speak accurately, I would prefer to answer that by looking at my report.

Q. So then the answer is no, you are not willing to share your understanding of the allegations in this lawsuit without looking at your report?

MS. O'NEILL: Objection. Form.

THE WITNESS: I'm a little confused by that question.

BY MS. BARNHART:

Q. You are not willing to share your understanding of the allegations in this lawsuit without looking at your report?

MS. O'NEILL: Same objection.

BY MS. BARNHART:

Q. Yes or no?

A. I would prefer to look at my report to answer the question. That's how I'm answering it.

Q. All right. That's not an answer.

It's going to be a long day; so buckle up.

A. Okay.

Q. What do you have in front of you right now?

A. I have my report.

Q. What report?

A. My report that I'm here to discuss regarding the case.

Q. It's a single report?

A. There's the report plus the rebuttal. And there are appendices with materials considered.

Q. So there are two reports in front of you right now?

A. My curriculum vitae is also a part of this --

Q. Okay. What's behind Tab 1?

A. -- package of information.

(Stenographer interrupted for clarification of the record.)

BY MS. BARNHART:

Q. What's behind Tab 1?

(Stenographer interrupted for clarification of the record.)

BY MS. BARNHART:

Q. You have a binder in front of you. There are three tabs. What's behind Tab 1?

A. Behind Tab 1 is the trial report.

Q. Your trial report in the federal lawsuit pending in Oakland; correct?

A. Correct.

Q. Okay. What's behind Tab 2?

A. The rebuttal trial report.

Q. What's behind Tab 3?

A. This is the Meta defendants' notice of deposition.

Q. Okay. Why did you bring these documents with you to the deposition?

A. Because I believed I would be asked questions about these documents.

Q. Have you annotated these documents at all?

A. I have not.

MS. BARNHART: Okay. We'll mark this as Exhibit 5 probably eventually, but we'll do that at a break.

BY MS. BARNHART:

Q. So there's no need for you to be looking at the binder in front of you as opposed to the copy of your report that I give to you; correct?

A. They should be the same, but I would prefer to look at what I have in front of me.

I don't know what you're about to give me; I would want to compare it side by side.

MS. BARNHART: All right. Well, then let's go off the record, please.

THE VIDEOGRAPHER: Stand by. The time is 9:26 a.m., and we're going off the record.

(Recess taken.)

THE VIDEOGRAPHER: The time is 9:40 a.m., and we are back on the record.

MS. O'NEILL: Counsel, I just wanted to allow Massachusetts the time to put their reservation of rights on the record before we get started back.

MS. BARNHART: Okay.

MS. SERALATHAN: It's the understanding of the Commonwealth of Massachusetts that the defendants take the position that Massachusetts cannot participate in this deposition.

The Commonwealth of Massachusetts states for the record that we have timely served, prior to today's deposition, opening and rebuttal reports from Dr. Zicherman in our litigation Commonwealth of Massachusetts v. Meta Platforms, Inc., and Instagram

LLC, Suffolk Superior Court, Civil Action Number 2384CV02397, and that these reports are substantially identical to those served by the MDL plaintiffs.

Because they are substantively identical, Massachusetts, for purposes of coordination and efficiency, issued a cross-notice for today's deposition. The Commonwealth opposes any efforts to further depose Dr. Zicherman based on such disclosures, but are happy to meet and confer with the defendants at the appropriate time on this issue if and/or when it becomes ripe.

MS. BARNHART: Noted.

I will also note we have a Court order from the MDL. It's ECF2157 that says that the deposition in Massachusetts, which is a non-MDL AG case, is to be taken separately.

You know, we've had offline correspondence about this issue. I will note for the record I don't believe I've seen any cross-notice for this deposition by the Commonwealth of Massachusetts. I could be mistaken on that, but I don't believe we've seen one.

And, in any event, we would reserve all rights to seek Dr. Zicherman's deposition in that

separate case, as we're entitled to do.

BY MS. BARNHART:

Q. So, Dr. Zicherman, you originally submitted an expert report in the MDL on May 16, 2025; correct?

A. That date sounds accurate.

Q. And you submitted a rebuttal report on July 30th, 2025; correct?

A. I again believe that date sounds accurate.

(Exhibits 1 through 5 were marked for identification and are attached to the transcript.)

BY MS. BARNHART:

Q. You have in front of you what have been marked as Exhibits 1 through 5. And just for the record, we'll take you through them.

Exhibit 1 --

A. Are they here? Okay.

Q. Yes.

Exhibit 1 on the top, that's your opening May 16th, report; correct?

A. It appears to be my opening report.

Q. Okay. Exhibit 2, this is Appendix A to your opening report, your materials considered list; correct?

A. That appears correct.

Q. Exhibit 3 -- that's Appendix B to your opening MDL report -- that's your CV as of May 16th; correct?

A. I do believe this is my CV through May of 2025.

Q. Okay. Exhibit 4 is a copy of your rebuttal report in the MDL dated July 30th, 2025; correct?

A. It appears correct.

Q. All right. And Exhibit 5 we've marked as the binder that you brought with you today.

You can refer to whatever you're most comfortable with; I'll be referring to the Exhibits 1 through 4 when I'm discussing your report.

A. Okay.

Q. Is there anything you wish to correct or amend in either of your reports?

A. There's nothing I wish to amend or correct.

Q. Are you prepared to fully testify about all of your opinions today?

A. I am.

Q. Is there any reason you cannot testify fully and accurately about your opinions today?

A. No.

Q. Have you done all the work you need to do in order to be able to testify at a trial in this case?

MS. O'NEILL: Objection. Form.

THE WITNESS: Have I done -- can you repeat that question for me.

BY MS. BARNHART:

Q. Have you done all the work you need to do in order to be able to testify at a trial in this case?

MS. O'NEILL: Same objection.

THE WITNESS: Well, this isn't -- are we talking about potentially, like, a court appearance? I'm sure there are other -- there's more work that could be done in the future of the case, but up to date? Is that the question?

Am I understanding that correctly?

BY MS. BARNHART:

Q. Do you need to do any further work in order to be able to testify at trial about your opinions in this case?

MS. O'NEILL: Same objection.

THE WITNESS: Yes, I find the question a bit confusing. I don't know if there are technicalities I'm not aware of for the future of

the case.

But to date, being here, there's no other work that I need to do.

BY MS. BARNHART:

Q. Okay. If trial were tomorrow, you'd be fully prepared to testify about your opinions at trial; right?

A. That would be a pretty short turnaround. I don't have much experience going to court. But sure, I'd be prepared to talk about my opinions and report.

Q. Okay. You've not been asked to perform any further work before trial that you have not yet performed; correct?

A. Performed further work before trial I have not yet performed? I don't believe so.

Q. Are you married, Dr. Zicherman?

A. I'm married.

Q. What does your spouse do for work?

A. She works for Salesforce.

Q. Okay. What does she do at Salesforce?

A. She is a director of analytics for a Salesforce product.

Q. What product?

A. It is called Heroku.

Q. What is Heroku?

A. Not being in the tech world, I wish I can understand it more. It's not my area, but it has some integration with Salesforce at large.

Q. Is that all you know about Heroku?

A. My understanding of Heroku is it's a tech product. I'm not in a tech field. When it comes to coding, computers, it's a bit of a foreign language to me; so I don't know all the details of the work she does.

Q. Do you know if she works with user data in her role as director of analytics?

MS. O'NEILL: Objection. Foundation.

THE WITNESS: I really don't know.

BY MS. BARNHART:

Q. Have you talked to your wife about this case?

A. I have not had any substantial discussions with my wife about this case.

Q. Do you have any children?

A. I do.

Q. How many children do you have?

A. I have one child.

Q. How old is that child?

A. He is 20 months as of today.

Q. Where did you grow up?

A. I grew up in West Bloomfield, Michigan.

Q. What brought you to the Bay Area?

A. I initially came to the Bay Area for my addiction psychiatry fellowship in -- I believe it was the summer of 2017.

Q. How long have you been married?

A. (No response.)

Q. I'm going to send your wife this clip.

A. Go for it.

We've been together for five years. We've been married for -- we're going on two years now.

Q. And you said you haven't been deposed before. Have you ever testified at trial?

A. I have testified at trial.

Q. In paragraph 12 of your report, you say you have not previously testified as an expert at a trial or by deposition.

A. This is in paragraph 12?

Q. Correct.

A. Of what exhibit?

Q. Of -- excuse me. Yeah, of Exhibit 1, which is your opening report, paragraph 12.

A. Correct. I have not previously testified as an expert at a trial or by deposition.

Q. Okay. So when you said earlier you testified at trial, that was not in an expert capacity; correct?

A. I'm not sure of the technical designation. I don't believe I was considered an expert. This was a case in Oregon. They -- rules that I can't quite remember, but it was for an NGRI case. I'm not sure if technically I was considered an expert. I don't believe I was.

Q. NGRI means not guilty by reason of insanity; correct?

A. Correct.

Q. Surely, if you thought you were considered an expert, you would not have stated in your report that you've never previously testified as an expert; right?

MS. O'NEILL: Objection. Form. And argumentative.

THE WITNESS: Can you repeat the question.

BY MS. BARNHART:

Q. Well, maybe I'll ask it this way:

Is this statement in your report, paragraph 12, true or not true, that you have not previously testified as an expert at a trial or by deposition?

A. Well, I believe it to be true. It's my understanding I was not considered an expert in that case.

Q. You've never been qualified as an expert by a court; correct?

A. I don't believe that to be the case. This is -- the only case that that might have been in question, again, I don't believe it was the case.

Q. Have you ever served as a consulting expert in litigation?

A. No. I have not.

Q. You submitted another copy of your CV last week in advance of this deposition; correct?

A. Correct.

Q. Do you know offhand what the differences are between the CV that you submitted last week and the one you submitted with your report on May 16?

A. I would certainly prefer to answer that question looking at both CVs. I believe there was the addition of -- I'm trying to remember what -- I believe I added an engagement I had with the Stanford Parenting Center to the CV.

Q. What kind of engagement?

A. I was asked to provide a lecture or didactic aimed at parents discussing my beliefs and

considerations regarding social media use and potential interventions that parents could maybe implement if they think their child is having concerning use of social media, for instance.

Q. Is it fair to say you were presenting your medical views on the issue of the effects of social media use as part of that lecture?

MS. O'NEILL: Objection. Characterization.

THE WITNESS: Can you repeat the question again for me.

BY MS. BARNHART:

Q. Is it fair to say you were presenting your medical views on the issue of the effects of social media use as part of that lecture?

MS. O'NEILL: Same objection.

THE WITNESS: I mean, I've given many lectures. You know, I can give you a global understanding of what I remember; but I'd be happy to answer questions about it if I -- if you had any excerpts or any sort of video of it, I honestly would be happy to answer questions about it.

BY MS. BARNHART:

Q. Well, I'm happy to hear that.

So can you answer my question of is it fair to say that in the lecture you just referred to, you

were presenting your medical views on the issue of the effects of social media use?

A. If I remember correctly, that was among the views that I presented in that lecture.

MS. BARNHART: Okay.

(Exhibit 6 was marked for identification and is attached to the transcript.)

BY MS. BARNHART:

Q. I'll hand you what's been marked as Exhibit 6, which is a copy of your August 2025 CV.

Well, maybe I'll ask you.

Is this a copy of your August 2025 CV?

A. That does appear correct.

Q. And is Exhibit 6 the most up-to-date version of your CV as of today?

A. It should be, to my knowledge.

Q. No changes since you sent this to us last week; correct?

A. Correct.

Q. All right. Let's go through some of your educational history.

You attended undergrad at the University of Michigan; is that correct?

A. That is correct.

Q. And your major was general studies?

A. That's correct. I did major in general studies.

Q. What is general studies?

A. Well, this is a long time ago now. I believe I can still answer this correctly, but I believe the requirements for general studies included essentially half of your credits being upper-level coursework in essentially any discipline.

Q. So this was not a premed major; correct?

A. It essentially was for me. So you can -- it's sort a design your own major in a way. The designation is general studies; but you can predominantly take premed coursework, for instance, if you want.

Q. Was there a separate premed track at the University of Michigan?

A. I don't believe so.

Q. There was not a premed major specifically?

A. To my knowledge, I don't recall there being a premed major.

Q. Did you have the option to major in biology?

A. I had the option to major in many different

fields.
Q. Right, including a number of hard sciences that you did not choose to major in; correct?
A. Correct. I chose not to major in a hard science.
Q. What was your GPA?
A. I do not recall.
Q. Do you remember approximately what it was?
A. This was a long time ago. I would have to look in my transcripts to answer that accurately.
Q. Did you go straight to medical school after graduating college?
A. What do you mean by "straight through"?
Q. Okay. What did you do after graduating college?
A. Well, I -- if I recall correctly, I did have a quick turnaround between undergrad and attending med school.
Q. It looks like you graduated college in 2005; is that right?
A. That is correct.
Q. I presume that was spring of 2005; correct?
A. I believe that's correct.
Q. And you did not start med school until fall of 2006; correct?

A. That is not correct. I began, if I remember correctly, winter of 2006.
Q. So January of 2006?
A. I believe that was when I started.
Q. That's not the typical start date for med school, is it?
A. Well, for the med school that I went to, it had several starting dates, including the January start date.
Q. Why did you choose to start in January as opposed to the fall of 2005?
A. As opposed to the fall of 2005?
I don't really recall. I don't recall if I was accepted at that point. There could have been a variety of reasons I chose a January start date.
You're asking me a question about something 19 years ago. Yeah, I don't remember all the details about why I started in January as opposed to the fall.
Q. Well, I'm asking you questions about your medical training, which I think is relevant to your purported expertise.
So what did you do between the spring of 2005 and January of 2006?
MS. O'NEILL: Object to the preamble.

THE WITNESS: Between the spring of 2005 and?
BY MS. BARNHART:
Q. January of 2006.
Were you employed?
A. I don't recall. I don't believe I was employed.
Q. Where did you live during that time period?
A. You're really jogging my memory here, 20 years ago now. I believe I was living in West Bloomfield, where I grew up the time between finishing undergrad and beginning med school.
Q. When did you first begin applying to medical school?
A. I really don't remember.
Q. How many medical schools did you apply to?
A. I don't remember.
Q. Did you apply to more than five medical schools?
A. I don't recall.
Q. You can't give me any estimate of the number of medical schools that you applied to?
MS. O'NEILL: Objection. Asked and answered.
THE WITNESS: So this -- we're approaching

about 20 years ago. I just -- I don't remember how many med schools I applied to.
BY MS. BARNHART:
Q. Is your memory not that great generally?
MS. O'NEILL: Objection. Argumentative.
THE WITNESS: You're asking me a question about something 20 years ago; I'm answering to the best of my abilities. I've had a lot of education. I've been a lot of different places. I'm sorry if I don't quite remember how many med schools I applied to.
BY MS. BARNHART:
Q. Okay. And I'm not asking you for a precise number. You can't give me any estimate whatsoever of the number of med schools you applied to?
MS. O'NEILL: Objection. Asked and answered.
THE WITNESS: I really don't remember how many I applied to.
BY MS. BARNHART:
Q. Okay. I remember the number of law schools I applied to 20 years ago, but -- understood -- you don't remember.
Did you apply to any medical schools in the United States?

A. I don't recall applying to med schools in the United States.

Q. Did you only apply to the American University of the Caribbean?

A. I believe I applied to more than the American University of the Caribbean.

Q. And what other schools do you recall applying to?

A. I don't recall all the other schools. I remember I also applied to one called Ross. But beyond that, I really don't recall other schools I might have applied to.

Q. Why didn't you apply to any medical schools in the United States?

A. Well, I had colleagues -- I knew people that were going to this particular medical school. I liked the fact that it was a quick turnaround. And I did my research into the school, and it felt like it was a right fit for me.

Q. What do you mean by "quick turnaround"?

A. The fact that they had a January start as opposed to waiting even longer -- which US med schools traditionally start, like, a spring or summer term. So I was able to start several months sooner.

Q. Well, you could have applied to med school while you were still in college and started that fall; right?

A. I don't recall when I applied. Perhaps I could have done that. If I didn't, I really couldn't tell you.

Q. Okay. You were not accepted into any medical schools in the United States; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: If I went through the application process, perhaps I would have been accepted; but I was accepted to American University of the Caribbean.

BY MS. BARNHART:

Q. That was not my question. Were you or were you not accepted into any medical schools in the United States?

MS. O'NEILL: Objection. Form.

THE WITNESS: Sure. I was not accepted into any medical schools at the United States as I did not go through the application process.

BY MS. BARNHART:

Q. Where is the American University of the Caribbean?

A. It's on the island of Saint Martin.

Q. That is not in the United States; correct?

A. That is not in the United States.

Q. And the American University of the Caribbean is easier to get into than an American medical school; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: I don't know what it's like now; but yeah, that was an advantage of going to a Caribbean med school at least when I was going. The admission process was a quicker turnaround. It was easier to get into. It was also much harder to stay in school. The attrition rate was much higher than any American school.

BY MS. BARNHART:

Q. The attrition rate is higher because the American University of the Caribbean accepts a lower quality of student; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: I would absolutely disagree with that.

BY MS. BARNHART:

Q. Are you familiar with the "US News and World Report"?

A. The entity of the "US News and World Report"? Sure.

Q. You understand that "US News and World Report" publishes school rankings across various disciplines?

A. Sure.

Q. You understand that "US News and World Report" publishes medical school rankings?

A. I am aware that they publish rankings for med schools.

Q. Are you aware that the American University of the Caribbean Medical School is not even included in the "US News and World Report" rankings?

MS. O'NEILL: Objection. Form.

THE WITNESS: I wouldn't know as I haven't looked at those rankings in a very long time if I even really ever looked closely at those rankings.

BY MS. BARNHART:

Q. Do you have any reason to dispute that the American University of the Caribbean does not even appear in the list of the top 200 medical schools ranked by "US News and World Report"?

MS. O'NEILL: You know, objection. Form.

THE WITNESS: Does the list only look at US medical schools? I'd have to take a closer look at it. I -- it says US medical school rankings. I would say there are plenty of exceptional medical

schools around the world.
BY MS. BARNHART:
Q. So no, you have no reason to dispute that the American University of the Caribbean does not even appear in the list of the top 200 medical schools ranked by "US News and World Report"?
MS. O'NEILL: Objection. Form. Foundation.
THE WITNESS: You know, I'd have to take a look at the list; but, again, I would say I don't believe that really matters, considering there are excellent medical schools throughout the world.
BY MS. BARNHART:
Q. I'm not asking you whether it matters; I'm asking you whether you know if it appears on that list.
Do you know or do you not know?
MS. O'NEILL: Same objections.
THE WITNESS: You're saying it doesn't appear; so I -- that's -- if you're being truthful, then, you know, we can say it doesn't appear.
But I would say to completely and thoroughly answer that question, there are many great medical schools around the world that are not in the United States.

BY MS. BARNHART:
Q. Are you familiar with an organization called EduRank?
A. I don't believe I'm familiar with that.
Q. Are you aware that EduRank ranks medical schools across the world?
A. Again, I'm not familiar with this organization.
Q. Are you aware that EduRank ranks American University of the Caribbean as number 5,855 in the world based on, quote/unquote, alumni impact?
MS. O'NEILL: Objection. Foundation.
THE WITNESS: I've never looked at this list, and I don't know what criteria they use to rank a med school.
BY MS. BARNHART:
Q. You're an alumnus of that medical school; right?
A. Correct.
Q. Did your education at the American University of the Caribbean give you the same licensing access within the United States that an American medical school would have?
MS. O'NEILL: Objection. Form.
THE WITNESS: I believe it did.

BY MS. BARNHART:
Q. With your degree from the American University of the Caribbean Medical School, could you have worked in any US state?
A. I believe that was an advantage to specifically going to that medical school.
Q. Meaning yes, you could have been certified in any -- certified and licensed in any US state with that degree?
A. That's my understanding.
Q. What's that understanding based on?
A. Based on word of mouth from alumni, the school itself, doing my own research into the school prior to attending.
Q. Did you take any addiction courses in medical school?
A. Did I take any addiction courses in medical school? You're talking about, like, basic science classes? Is that what you're getting at, actual classroom-based coursework?
Q. I don't know what distinction you're trying to make, but can you answer my question.
Did you take any addiction courses in medical school?
MS. O'NEILL: Objection. Form.

THE WITNESS: I would say that addictions are covered through several different courses in basic sciences. I don't believe there's any -- at least to my knowledge, any med school offering a basic science course in addictions.
It would be great if they do, but a lot of that material is covered in other courses.
BY MS. BARNHART:
Q. So you did not take any courses that were specific to addiction in medical school; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, again, I wouldn't agree with that. A course might not be called addictions, but, you know, you learn about the nature of addictions and patients with addictions throughout different kinds of courses. We learn about addiction pharmacotherapy treatment in a pharmacotherapy class, for instance.
BY MS. BARNHART:
Q. Did any of the coursework that you took in medical school cover technology addiction?
MS. O'NEILL: Objection. Form.
THE WITNESS: I would say that coursework covered concepts of addictions whether they are behavioral- or substance-related.

BY MS. BARNHART:
Q. That wasn't my question.
Did any of the courses that you took in medical school cover technology addiction specifically?
MS. O'NEILL: Same objection.
THE WITNESS: I believe that the idea of an addiction like that is covered in coursework that we would be taking in a basic science class.
BY MS. BARNHART:
Q. Do you recall a professor in medical school ever saying to you the phrase "technology addiction"?
A. I don't recall that specific phrase 20 years ago.
Q. What did you do between your graduation from medical school in 2011 and your residency beginning in 2012?
A. Can you repeat the time frame.
Q. You graduated from medical school in 2011; correct?
A. Correct.
Q. And you didn't begin your residency at Texas Tech until July 2012; correct?
A. Correct.

Q. So what did you do between your graduation from medical school and starting your residency?
A. If I remember correctly, I did a lot of reading and preparing myself for internship and residency.
Q. Did your internship -- by "internship," do you mean your psychiatry residency at Texas Tech?
A. Right. You can refer to the first year of residency training as an internship. We can call it residency, though. I think either designation is fine. I guess I prefer to call it residency for three years, though.
Q. Was Texas Tech your first choice in the match process?
MS. O'NEILL: Objection. Form.
THE WITNESS: I do recall being it my first choice.
BY MS. BARNHART:
Q. And did you match in the first round of applying to residencies?
A. I did.
Q. And over the course of your training, you did four residencies and fellowships?
A. So I did one residency and three fellowships.

Q. Did you complete all of those residencies and fellowships?
A. I did.
Q. Were any of those positions research positions as opposed to clinical?
A. I mean, there's an expected research element in training of all the programs I went to, but these were primarily clinic-driven and -focused programs.
Q. When you say there's an expected research element in training, does that mean you expected to publish research?
A. Not necessarily.
Q. So what do you mean "expected research element"?
A. Well, you can engage in research in a lot of different ways. It could also be engaging in some sort of quality -- qualitative improvement project that isn't published, for instance. I mean, it could even be researching a topic and providing some form of a high-quality grand rounds.
(Stenographer interrupted for clarification of the record.)
BY MS. BARNHART:
Q. You completed your addiction psychiatry

fellowship at UCSF in June 2018; correct?
A. I believe that's correct.
Q. At any point during your addiction psychiatry fellowship, did you apply to permanent positions at hospitals or medical schools?
A. Can you repeat the question for me.
Q. At any point during your addiction psychiatry fellowship, did you apply to permanent positions at hospitals or medical schools or private clinics?
A. I don't recall applying to permanent positions while I was in that fellowship.
Q. So while you were doing your fellowship training at University of South Florida and UCSF, you did not apply to any jobs outside of other fellowships?
A. You're talking about permanent jobs?
Q. Any job other than a fellowship.
A. Yeah, I did have what you would consider moonlighting experience listed in my CV.
Q. Okay. But you -- well, anyway -- forget that.
Have you -- one of your fellowships was in forensic psychiatry; correct?
A. Correct.

Q. You completed that in June of 2019; is that right?
A. I believe that's correct.
Q. You're not board certified in forensic psychiatry; right?
A. I'm not.
Q. Have you ever attempted to become board certified in forensic psychiatry?
A. I did take the test once.
Q. You did not pass?
A. I am not board certified. I did not prepare for that test. And I do not plan on taking it again.
Q. All right. Can you answer my question, please.
Did you fail the board certification exam in forensic psychiatry?
A. Well, I didn't pass it; so I think that answers your question.
Q. So you failed the board certification exam in forensic psychiatry?
A. You can say that's accurate.
Q. Can you say that's accurate?
A. Yes. Yes.
Q. Okay. Have you failed any other board

certification exams in your career?
A. I've taken lots of exams. I don't recall all my marks. That was a recent one, though; so I do remember that one.
Q. You said you don't recall your marks. Do you recall failing any other board certification exams in your career?
A. I don't recall.
Q. Okay. You became board certified in addiction psychiatry in October of 2020; correct?
A. In addiction psychiatry in 2020?
I would need to reference my CV to look at the exact date. Board certified in addiction psychiatry, October 2020. You said addiction psychiatry?
Q. Correct.
A. Correct.
Q. Okay. And you finished your addiction psychiatry fellowship in June of 2018; correct?
A. Correct.
Q. Did you take the board -- the addiction psychiatry board certification exam more than once?
A. I don't recall taking that more than once.
Q. So as far as you can remember, you passed that on the first try?

A. I believe that is correct.
Q. And why did it take you so long after completing your fellowship to become board certified?
MS. O'NEILL: Objection. Form.
THE WITNESS: If I recall correctly, addiction psychiatry might only be offered every other year.
BY MS. BARNHART:
Q. Well, it took you two years to become board certified; right?
A. Again, I believe I took it as soon as I was able to. That's the best of my recollection. I also -- if I remember correctly again, it was offered every other year; so it might just not have lined up with when I completed the program.
Q. You're also board certified in child and adolescent psychiatry; is that right?
A. Correct.
Q. Did you take that board examination more than once?
A. I remember passing that. I don't recall if I had to take that one more than once.
Q. Okay. So it is possible that you failed that the first time?

MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: I've taken a lot of exams. I'm sorry if I don't remember all my scores on every exam that I've taken.
BY MS. BARNHART:
Q. Well, how many board certification exams have you taken?
A. Well, I've taken board certification exams in several subjects, including general psychiatry, child and adolescent psychiatry, addiction psychiatry, forensic psychiatry. And I believe I'm also about to be eligible to take the addiction medicine board exam.
Q. So you've only taken four board certification exams; correct?
A. I believe that's correct.
Q. It's a pretty big deal to fail your boards; right?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, you can take them again.
BY MS. BARNHART:
Q. But would you agree --
A. The pass rates are not very high for these

boards. I don't believe it's an issue. At the end of the day, I have three board certifications, likely to be a fourth when I'm eligible and take the addiction medicine board exam.

Q. So it's your testimony today that it is not a big deal to fail your board certification exam as a medical doctor?

MS. O'NEILL: Objection. Form. Characterization. Argumentative.

THE WITNESS: Well, again, I think it's important to note that I have passed three board exams. And yeah, you can take these more than once.

BY MS. BARNHART:

Q. So not a big deal to fail one?

MS. O'NEILL: Same objection.

THE WITNESS: I don't really agree with -- you're saying it's not a big deal; but, again, you have opportunities to take these exams multiple times if needed, which many very high-quality and respected psychiatrists have done.

BY MS. BARNHART:

Q. How many times have you taken the forensic psychiatry board exam?

A. I recall taking it the one time.

Q. And you haven't tried again?

A. I don't recall taking it again.

Q. Do you have any intent to try again?

MS. O'NEILL: Objection. Speculation.

THE WITNESS: I really probably don't have intention to take it again. I guess I might. But I don't really have plans as of now to take it again.

BY MS. BARNHART:

Q. So despite having the opportunity to take that exam multiple times if needed, you chose not to take it again after failing; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: I don't do much forensic work and I don't really find much utility for it, and it also costs a lot of money to be board certified and continue to renew these certifications.

BY MS. BARNHART:

Q. What is forensic psychiatry?

A. You're asking for a definition of forensic psychiatry?

Well, I think to completely and accurately answer that question that it would be worth searching the term; but it's my understanding that forensic is a Greek term meaning of an open forum, and it's the idea of performing psychiatric evaluations in a nonclinical capacity that are often

for the court system.

It also involves potentially the treatment of individuals who are in a -- incarcerated-type environment.

Q. And you can't -- sitting here today, having completed a forensic psychiatry fellowship, you can't completely and accurately define forensic psychiatry without googling it?

MS. O'NEILL: Objection. Form. Argumentative.

THE WITNESS: I think for most definitions, it would be helpful to be able to reference an exact definition, but I think I answered it clearly.

BY MS. BARNHART:

Q. As -- do forensic psychiatrists seek to understand legal causes of a given mental -- or -- yeah, of a given mental health outcome?

A. "Legal causes of a given mental health outcome."

MS. O'NEILL: I'll object to form.

THE WITNESS: I think that's -- can you rephrase that question.

BY MS. BARNHART:

Q. No. Can you answer the question?

Do forensic psychiatrists seek to

understand legal causes of a given mental health outcome?

A. "Legal causes." I don't know if I would accurately be able to answer that. I find that a confusing question.

Q. What's confusing about it?

A. Seek a -- can you repeat it for me one more time, please.

Q. Do forensic psychiatrists seek to understand legal causes of a given mental health outcome?

A. Do forensic psychiatrists seek to understand a legal explanation?

Q. Legal cause, Dr. Zicherman.

Do forensic psychiatrists seek to understand legal causes of a given mental health condition?

A. I think that you can say that's part of what goes into forensic psychiatry.

Q. But you don't do much of that, if any; correct?

MS. O'NEILL: Object to form.

THE WITNESS: I do not engage in much forensic psychiatry.

///

BY MS. BARNHART:

Q. Let's talk about your role at Stanford.

You first joined Stanford in November 2019; correct?

A. What was the exact date you mentioned?

Q. November 2019.

A. Yes, that's correct.

Q. Your first position was as a clinical assistant professor; correct?

A. Correct.

Q. Was that a full-time position?

A. That would be considered a full-time position.

Q. How many hours a week -- how many hours per week did you work as a clinical assistant professor at Stanford?

A. I think the expectation is that it would be roughly 36 clinic-facing hours a week, but my work responsibilities certainly exceeded that.

Q. How did you come to be employed at Stanford?

A. After finishing my final fellowship, I was searching for employment. And I wanted to work in the space of youth with addictions, and there was an open position advertised at Stanford that was the

exact fit I was looking for.

Q. So there was an existing -- did the youth recovery clinic exist when you applied to work at Stanford?

A. It did not.

Q. So what was the open position that you applied for?

A. Well, yeah, I would have to reference the exact recruitment packet that existed at the time.

To my recollection, the job was looking for someone to establish a youth addiction clinic.

Q. Did you work at any clinic other than the youth recovery clinic during your time at Stanford?

A. You're talking about through Stanford or outside of Stanford?

Q. Through Stanford.

A. I have done some work for other smaller clinical entities. But almost all my work has been with the recovery clinic.

Q. Who hired you for the role at Stanford?

A. Who hired me for the role at Stanford? I don't know who exactly made a final decision.

Q. Who was your supervisor at Stanford when you first joined?

A. When I first joined, I'd say I technically

had two supervisors: Antonio Hardan and Anna Lembke.

Q. Did you know Dr. Lembke before you applied to work at Stanford?

A. I believe I had some limited interaction with her when I was in addiction psychiatry training.

Q. Had you read any of her -- any of her publications before applying to work with her at Stanford?

A. I don't recall whether I read her publications prior to or after I started working at Stanford.

Q. And so when you first joined Stanford, what was the name of the clinic you were working in with Dr. Lembke?

A. When I first joined Stanford? So I didn't work with her in the clinic. I didn't -- it was just me.

Q. And by "in the clinic," you mean the youth recovery clinic?

A. Yes.

Q. Okay. So it was just you from the beginning of that clinic?

A. Correct.

Q. I noticed your CV said you didn't become director of that clinic until July 2023; is that right?

A. That's correct.

Q. Was there a director before you became the director?

A. There was not a director.

Q. Okay. So you describe Dr. Lembke as your supervisor. How did she supervise you?

A. Well, I would say she technically might be a supervisor as far as someone over me or leading the grant initiative. Maybe that would be the most appropriate way to answer. She's the director of the grant initiative that I was hired through.

But between her and Antonio Hardan, who is really my direct superior as the division chief of the child and adolescent psychiatry department, I was seeing patients independently as a, you know, licensed, practicing psychiatrist with the title of clinical assistant professor when I was hired.

Q. Would you say that Dr. Lembke influenced your views on addiction?

MS. O'NEILL: Objection. Form.

THE WITNESS: Yeah, I have read some of her writings, but that is among many materials that I've

reviewed over the years that has led to my opinion being formed, which, of course, is also primarily informed by my direct treatment of patients.

BY MS. BARNHART:

Q. Do you think highly of Dr. Lembke?

A. I do.

Q. Are you aware that Dr. Lembke is also a paid plaintiffs' expert in this litigation?

A. I'm aware that she's involved in litigation. I don't really know the extent of what that involves beyond that.

Q. So you don't have any awareness that she's being paid to do exactly what you're doing in this case, serve as an expert witness?

MS. O'NEILL: Objection. Form. Asked and answered.

THE WITNESS: I am not aware of payment structures or how she is involved with specific lawsuits involving this.

BY MS. BARNHART:

Q. You understand there's a number of lawsuits concerning the same subject matter as the one you've been retained for; right?

A. I do understand there are other lawsuits.

Q. Okay. Are you aware that Dr. Lembke has

been retained as an expert in every single other lawsuit concerning the same subject matter other than the one you've been retained for?

MS. O'NEILL: Objection. Form. Foundation.

THE WITNESS: I was not aware of that.

BY MS. BARNHART:

Q. Do you have any understanding for why Dr. Lembke is not serving as an expert witness in this litigation?

MS. O'NEILL: Objection. Form. Outside the scope.

THE WITNESS: I do not have an understanding.

BY MS. BARNHART:

Q. Do you understand that the AG plaintiffs sought to retain Dr. Lembke and came to you as a backup option?

MS. O'NEILL: Objection. Form. Argumentative. Outside the scope.

THE WITNESS: I don't know those details.

BY MS. BARNHART:

Q. Have you spoken to Dr. Lembke at all about this case or the subject matter of this case?

A. I have not had substantive discussions

about this case with Dr. Lembke.

Q. Have you ever discussed the subject of social media addiction with Dr. Lembke?

A. I have discussed the idea of social media addiction with Dr. Lembke.

Q. When was the last time you talked about social media addiction with Dr. Lembke?

A. I don't recall exactly. Maybe a few months ago.

Q. What was the nature of that discussion?

A. I really couldn't tell you. I can't recall exactly what we might have discussed.

Q. Have you ever disagreed with anything Dr. Lembke has said about the concept of social media addiction?

MS. O'NEILL: Objection. Form.

THE WITNESS: I don't recall if she has said anything I would particularly object to.

BY MS. BARNHART:

Q. You've not read the expert reports that she submitted in this general litigation, have you?

A. I have not.

Q. You said you haven't had substantive discussions with Dr. Lembke about this case. What other discussions -- nonsubstantive discussions have

you had with Dr. Lembke?

A. Nonsubstantive discussions?

Q. Well, I asked you earlier have you talked to Dr. Lembke at all about this case? And you said you have not had substantive discussions about this case.

I'm asking have you had nonsubstantive discussions about the case with Dr. Lembke?

A. What would be a nonsubstantive discussion?

Q. Well, you tell me. You were the one that used the word "substantive."

Have you had any discussions at all with Dr. Lembke about this case?

A. I would say I have not had discussions with her about details of this case.

Q. Is she aware that you're an expert in this case? Have you told her that?

MS. O'NEILL: Objection. Foundation.

THE WITNESS: She might be aware. I'm not sure all the details that she's aware of.

BY MS. BARNHART:

Q. Have you told her that you're an expert in this case?

A. I believe she -- I really -- I'm not sure of what she knows, to be honest.

Q. I'm not asking you what she knows; I'm asking you have you told her that you're an expert in this case?

A. I don't recall my conversations exactly that I've had with her about that. You know, I'm aware that we both have depositions involved with cases on similar dates, but that's really the extent of what I am aware of.

Q. So you're aware she's being deposed right now about this subject matter?

MS. O'NEILL: Objection. Form.

THE WITNESS: I don't really know what the case is or really what her positions are on this entirely or what she's being asked to discuss during her deposition.

BY MS. BARNHART:

Q. So how did you become aware that you both have depositions involved with cases on similar days?

A. I do meet with her with some frequency.

Q. How frequent do you meet with Dr. Lembke -- or frequently do you meet with Dr. Lembke?

A. We have official meetings typically once a month, but we do break for the summer typically.

Q. What do you discuss at these official

meetings?

A. It's usually details about how the clinic operations are running. We talk about the grant that I was hired through. If I feel like I need any additional support, we talk about the research that we are attempting to engage in through the recovery clinic.

Those are topics that we typically engage in. It's not very didactic, though. We don't typically discuss our thoughts on, you know, social media during those sessions.

Q. Do you take any notes of those meetings?

A. I typically do not take notes during those meetings.

Q. Do you sometimes take notes at those meetings?

A. I don't recall taking notes during those meetings.

Q. Okay. And you also discuss your deposition schedules during these meetings; is that right?

MS. O'NEILL: Objection. Mischaracterization.

THE WITNESS: I don't know what her exact schedule is.

///

BY MS. BARNHART:

Q. But the fact that she was being deposed and that you were being deposed came up at one of these meetings; right?

A. That -- sure. That did come up.

Q. As of October 2024, your current position at Stanford is clinical associate professor; correct?

A. That is correct.

Q. Is that a full-time position?

A. That is considered a full-time position.

Q. And, again, with the -- is it the same expectation of 36 clinic hours per week?

A. I think expectations have shifted somewhat. I have my own patient panel. I have a lot of responsibilities for supervising other child and adolescent psychiatry fellows, psychology trainees, addiction medicine fellows.

We are trying to establish a research component of the recovery clinic, which takes time.

So I have several responsibilities, not all fully clinical; but the majority of my work is clinical and directly seeing patients.

Q. So if not 36, how many clinic hours per week do you have?

A. It's -- it could be in the 30s, but it could also be a little bit lower at times as well, perhaps in the mid 20 hours of actual patient time.

There is some fluctuation, though.

Q. Just so I'm clear, this -- the Stanford recovery clinic was started -- let me start over.

The Stanford youth recovery clinic was started in 2019; is that right?

A. Correct.

Q. And you became the director in 2023; correct?

A. Correct.

(Exhibit 7 was marked for identification and is attached to the transcript.)

MS. BARNHART: Let's mark Tab 21.

BY MS. BARNHART:

Q. I'll hand you what's been marked as Exhibit 7.

MS. O'NEILL: Do we have any copies?

MS. BARNHART: Yes.

MS. O'NEILL: Thank you.

BY MS. BARNHART:

Q. Dr. Zicherman, this is a copy of the webpage for the Stanford youth recovery clinic;

correct?
A. That appears to be the case.
Q. You're listed as the sole faculty of the clinic; is that right?
A. Correct.
Q. The only specific behavioral addiction referenced on this webpage is video game addictions; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: It does say video game addictions are among the many behavioral addictions treated in the clinic.
I would like to get this changed. It is not easy to get a website changed through Stanford, though.
BY MS. BARNHART:
Q. There's no mention of social media addiction on this website; correct?
A. There's no specific mention to the words "social media addiction" on the website.
Q. Okay.
A. Yeah, I would reference that that absolutely falls within the other behavioral addictions treated, though.
Q. Right. All I'm asking you is how you

advertise and describe the recovery clinic.
You do not list social media addictions on this web page; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, I don't really advertise much. Patients find us pretty readily.
BY MS. BARNHART:
Q. Did you -- are you going to answer my question?
You do not list social media addictions on this web page; correct?
A. The specific term "social media addiction" are not on the website currently. That will change in the future. And it's not easy to change the website. I don't have control over the website.
Q. You are listed as the sole -- sorry. I already asked you that, but -- so you're listed as the sole faculty member.
Are you, in fact, the sole faculty member of this recovery clinic?
A. It depends on your designation of faculty. I do work closely with another therapist who's an LCSW who was recently hired to the clinic and works, often directly, with the other patients in the -- with the patients in the recovery clinic.

Q. Who is that therapist?
A. His name is Garret Forshee.
And there was a therapist before him that I also worked with closely.
Q. Who was that therapist?
A. Her name was Karen Parsons.
Q. Neither of those individuals is a medical doctor; correct?
A. They are not medical doctors.
MS. BARNHART: If you click on your name on Exhibit 7, it takes you to your Stanford profile, which we'll mark as Exhibit 8.
(Exhibit 8 was marked for identification and is attached to the transcript.)
BY MS. BARNHART:
Q. Is this a true and correct copy of your Stanford web bio?
A. I haven't looked at this in a long time. It looks on a glance to be correct to my knowledge.
Q. Your Stanford web profile does not list any specialty in social media addiction; correct?
A. It lists my board certification and specialty in addiction psychiatry.
If you're asking do the words "social

media" exist on this profile, they do not.
Q. And that is what I was asking. So let's focus on what I'm asking.
There's only one publication listed on your Stanford web profile; correct?
A. That appears to be correct.
Q. Is this the only publication you've ever published in your career?
A. There have been others.
Q. How many others?
A. To my knowledge, there are, I believe, two other publications that I can recall.
Q. Your Stanford web profile does not list any publications about social media addiction or social media in general; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: It does not list any publications about social media addiction.
BY MS. BARNHART:
Q. And the publication that is listed is a vaping toolkit; is that right?
A. Correct.
Q. So that -- am I correct in understanding this is not an empirical research study?
A. Technically, this is a publication; but it

is more intended as an online dynamic toolkit.
Q. So no, it is not an empirical research study?
A. It is based on empirical research, but it's not an empirical research study.
Q. Was this online dynamic toolkit peer-reviewed?
A. I don't believe -- sorry. I don't recall the exact peer review process that the toolkit undertook.
Q. So you don't know one way or the other whether this toolkit underwent peer review?
A. I don't recall the peer review process.
Q. The first author listed on this toolkit is Bonnie Halpern-Felsher; correct?
A. Correct.
Q. Who is that?
A. She is a research focus PhD, I believe, in psychology; but I could be wrong about that. But she is in charge of a lab at Stanford within the adolescent medicine division, and a lot of her work is focused on vaping.
Q. She's also a paid plaintiffs' expert in this litigation; correct?
MS. O'NEILL: Objection. Foundation.

THE WITNESS: I am not aware of that.
BY MS. BARNHART:
Q. She's never told that -- she's never told you that she's working with the plaintiffs' lawyers in this litigation?
A. She -- I have not been informed of that.
Q. Are you aware that she's served as an expert witness in other litigation?
A. I am aware she has served as an expert witness in litigation.
Q. Okay. Do you collaborate with Dr. Halpern-Felsher frequently?
MS. O'NEILL: Objection. Form.
THE WITNESS: We did. I had some funding to work with her lab several years ago, but that funding I don't believe existed in 2024.
But I will be collaborating with her, I believe, on this toolkit again starting in September. That is my understanding.
I have not had much interaction with Bonnie over the past -- Dr. Halpern-Felsher for the past one to two years.
BY MS. BARNHART:
Q. Have you ever discussed the subject of social media addiction with Dr. Halpern-Felsher?

A. I don't recall discussing the topic.
Q. All right. You can put that to the side.
Dr. Zicherman, you understand that your employer, Stanford, requires disclosure of expert witness work in litigation; correct?
A. I am not aware of the technicalities of what they require.
Q. Have you disclosed your work as an expert witness in this litigation to Stanford?
A. I would have to review what I have disclosed or not disclosed. I cannot recall at this time.
Q. Sitting here today, you do not know one way or the other whether you've disclosed this potential conflict of interest to Stanford?
MS. O'NEILL: Objection. Asked and answered.
THE WITNESS: I believe I've answered the question. I would have to refresh my memory and see if I -- you know, what I have disclosed.
BY MS. BARNHART:
Q. Will you agree to do that on the next break?
A. That could take some time. I'm not even -- I would have to familiarize myself with the

mechanisms that I would have to research and log in to figure out what exactly I would need to search for.
I guess I'm a little confused of this line of questioning, to be honest, and what exactly you're asking me to do as far as disclosure to Stanford.
Q. Well, I think if you had disclosed this as a potential conflict of interest to Stanford, you'd probably have a little bit better idea of what I'm talking about; right?
MS. O'NEILL: Objection. Form. Argumentative.
THE WITNESS: I don't see where the conflict of interest is.
MS. BARNHART: All right. Let's -- Tab 4.
(Exhibit 9 was marked for identification and is attached to the transcript.)
BY MS. BARNHART:
Q. We'll show you what's been marked as Exhibit 9, which is a web page from the Stanford University conflict of interest website.
Have you ever visited the conflict of interest website, Dr. Zicherman?

A. I probably have.
Q. Are you aware that it is required of you as an employee at Stanford to disclose any potential conflicts of interest to the university?
MS. O'NEILL: Objection. Form.
THE WITNESS: I do have an understanding of that.
BY MS. BARNHART:
Q. Okay. What is your understanding of those requirements?
A. I would have to look very closely and carefully at this document, I think, to accurately answer that question.
Q. So you do not have an understanding outside of the document that I just handed you?
MS. O'NEILL: Objection. Mischaracterization.
THE WITNESS: Well, this seems very technical. And I think to fully answer that question, I would want to carefully review this document.
BY MS. BARNHART:
Q. Does that mean you have not carefully reviewed this document before today?
MS. O'NEILL: Same objection.

THE WITNESS: Like I said, I have encountered this before; but I would need to fully refamiliarize myself with this.
BY MS. BARNHART:
Q. All right. Well, let me direct you to the question -- this is a frequently asked questions web page of the Stanford conflict of interest website; correct?
A. That appears to be correct.
Q. If you look at the third frequently asked question, this question says:
"I am occasionally asked to serve as an expert witness in legal proceedings and am compensated for that service."
Do you see that?
A. I do see that.
Q. And am I correct that you are serving as an expert witness in legal proceedings and you're compensated for that service?
A. That is correct.
Q. So this frequently asked question applies directly to you; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: That is a question I would

have to see if this is in reference to a clinical professor or someone who is not on a clinical line of work at Stanford.
It may or may not specifically apply to me in this case.
BY MS. BARNHART:
Q. So you think the rules don't apply to you because you're a clinical professor?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, there are different rules governing different lines of employment at Stanford.
BY MS. BARNHART:
Q. Why would conflict of interest rules that apply to all Stanford University employees not apply to you as a clinical professor?
MS. O'NEILL: Objection. Form.
THE WITNESS: There just might be some different technicalities and rules governing this.
BY MS. BARNHART:
Q. Okay. But you don't know that; right? You're just speculating?
MS. O'NEILL: Objection. Form.
THE WITNESS: You know, I would need to carefully review this in its entirety.

BY MS. BARNHART:
Q. Can you answer my question?
You're just speculating that these rules might not apply to you; correct?
MS. O'NEILL: Same objection.
THE WITNESS: I think I'm asking a fair question.
BY MS. BARNHART:
Q. You're not here to ask questions, Dr. Zicherman; you're here to answer them.
So my question is do you know for certain whether or not these rules apply to you?
A. I think I -- I believe I answered that question to the best of my abilities.
Q. Which is "I don't know"; correct?
A. I would need to, again, review this carefully to fully and accurately answer that question.
Q. All right. Well, I'm trying to review it carefully with you. And if you look at the frequently asked question that I just directed to you, the question asks:
"Does serving as an expert witness in legal proceedings and being compensated for that service count as

consulting?"
Do you see that question?
A. I do see that.
Q. And the answer is:
"Since service as an expert witness does take time away from your primary responsibilities as a Stanford faculty member, if that service is compensated, the time devoted should be considered and reported as outside consulting."
Do you see that?
A. I do see that.
Q. (Reading):
"If the service is not compensated, it may fall under the definition of pro bono public service and therefore not qualify."
Do you see that?
A. I do see that.
Q. And your service is compensated. We established that; correct?
A. Correct.
Q. Okay. So because your service is compensated, this web page clearly states the time

devoted to your expert witness work should be considered and reported as outside consulting.
MS. O'NEILL: Objection. Form.
BY MS. BARNHART:
Q. Do you see that?
A. There's a caveat also that I am full-time -- technically full-time. I am 0.9 FTE. And, again, there are different rules that govern being a clinical professor versus someone who is on a more research or research hybrid line of work.
If you are less than 1.0 FTE, which is still considered full-time when I'm 0.9 FTE, you are allowed to do outside work and be compensated for it.
So, again, that is why I'm asking -- this document, everything in it, it might not entirely refer to me. It would have to be clarified exactly what kind of employee this is specifically aimed at, and there are different rules governing different kinds of employees.
Q. I don't think you understand the gravity of the situation, Dr. Zicherman. I'm not saying -- neither is this document saying -- that you're prohibited from doing outside work and being compensated for it.

This document is saying that you have to disclose that as a potential conflict to Stanford University.
Do you understand that? You understand that concept? Conflicts of interest --
MS. O'NEILL: Objection. Form.
THE WITNESS: I understand what you're saying.
BY MS. BARNHART:
Q. Okay. And so what you just said is entirely unresponsive to that point.
Is it your testimony today that, simply because you're a clinical professor, you do not have to disclose potential conflicts of interest?
MS. O'NEILL: Objection. Form. Mischaracterizes his testimony.
THE WITNESS: I think there could be nuances there. And, again, I would have to fully review and -- this document and figure out if what you have provided to me here is relevant to me or someone who is not on my employment line.
BY MS. BARNHART:
Q. You don't know that, sitting here today, whether or not these rules apply to you?
A. I think you're asking a complicated

question, and I would need to take some time to review and answer appropriately.
Q. It's really not complicated, Dr. Zicherman.
I'm asking you did you or did you not disclose your expert witness work as a potential conflict of interest to your employer, as you were required to do?
MS. O'NEILL: Objection. Form.
THE WITNESS: And I will again answer what you were saying is a requirement, I'm saying I don't know if that is actually correct.
BY MS. BARNHART:
Q. All right. Let's break it down.
You do not know if you are required to disclose your expert witness work; fair?
That's what you just said.
A. Again, I think to fully and accurately answer that, I would need to consult with Stanford and also see what I have or have not disclosed.
Q. Dr. Zicherman, I'm not asking you to go figure it out now that I've raised this for you.
I'm asking you do you know, sitting in this chair today, are you required to disclose conflicts of interest such as your work as an expert witness in this litigation?

MS. O'NEILL: Objection. Form. Foundation.

THE WITNESS: And based on reviewing this, my answer would be technically I'm not sure. I would have to consult with Stanford to ask their opinion on this.

BY MS. BARNHART:

Q. Okay. So you're not sure. That's all I was asking for.

You don't know one way or the other? You haven't considered doing this because you don't know if these rules apply to you?

MS. O'NEILL: Objection. Form. Mischaracterization.

THE WITNESS: Again, I think there are technicalities at play here, and I think it's really almost impossible to answer your question accurately without understanding all these technicalities and whether these apply to me as a clinical associate professor.

BY MS. BARNHART:

Q. And you do not know, sitting here today, that you have actually disclosed your work as an expert witness in litigation pursuant to this policy?

A. I can't recall if I have disclosed it or not.

MS. BARNHART: Okay. We're going to take a break, and I'd like you to investigate that question further for us. Okay?

So we can go off the record.

MS. O'NEILL: And I'll just say I don't think there's a duty for him to do that.

THE VIDEOGRAPHER: Stand by.

The time is 10:56 a.m. We're going off the record.

(Recess taken.)

THE VIDEOGRAPHER: The time is 11:21 a.m., and we are back on the record.

BY MS. BARNHART:

Q. Okay. Dr. Zicherman, we've taken a pretty lengthy break.

Were you able to look into the question of whether or not you have disclosed your work as an expert witness in this litigation to Stanford?

MS. O'NEILL: And I'm just going to note that he's not under an obligation to do research.

THE WITNESS: Well, I've thought about the question more. I'm not logging into any system today, though, to determine whether or not I have

reported that information or not.

BY MS. BARNHART:

Q. Why not?

A. Well, that would involve knowing logins, using a personal computer that has secure information on it. I would not feel comfortable doing that.

Q. Okay. You're not interested in knowing whether or not you're in breach of Stanford's conflicts policies?

MS. O'NEILL: Objection. Form. Mischaracterization.

THE WITNESS: Well, I will comply with whatever I need to with Stanford. I believe you sent me an -- a snapshot of an FAQ document. I would want to review that and the rest of the website clearly, consult with who I need to at Stanford, and understand if I need to disclose this -- this annually, which is what it says in the FAQ, that there's annual disclosure of financial interests.

And when this annual date might be, I only just recently began being compensated.

BY MS. BARNHART:

Q. So are you suggesting you have not made any

disclosures so far, and it's just a question of whether you need to do it?

A. I can't recall, to be honest. I would have to log into the system. But if I have to, and I have not, then I am not opposed to doing that.

Q. Is it still your position that these rules don't apply to you because you're a clinical educator?

MS. O'NEILL: Objection. Form. Mischaracterizes his testimony.

THE WITNESS: I would have to review all the documents relating to the OPAC website carefully to see which ones are in relation to me versus someone who was hired under a different pathway.

(Exhibits 10 and 11 were marked for identification and are attached to the transcript.)

BY MS. BARNHART:

Q. All right. I'm handing you what's been marked as Exhibits 10 and 11.

These are excerpts of the school of -- Stanford School of Medicine Faculty Handbook. Exhibit 10 is Section 3.3.E [sic] of the Stanford School of Medicine Faculty Handbook, and Exhibit 11 is Section 3.7.D [sic] of the Stanford School of

Medicine Faculty Handbook.

MS. O'NEILL: And I'll just object that -- to the extent that this is not the full document but just portions of the document.

MS. BARNHART: These are the full sections that we've printed out from the website.

BY MS. BARNHART:

Q. Do you have any reason to dispute that, Dr. Zicherman?

A. I would have to go to the website myself to verify.

Q. And you have no reason to dispute that we've clicked "print" from the website as it appeared to us on our computers; right?

A. I'm not sure exactly what you did. You know, I'm looking at two pages of information here.

Q. Have you read and reviewed the Stanford School of Medicine Faculty Handbook previously?

A. I have reviewed the handbook.

Q. Okay. So Section 3.3.E is titled "Specific/Supplemental Criteria for Clinical Associate Professors."

Do you see that?

A. Yes.

Q. You are a clinical associate professor;

correct?

A. I'm a clinical associate professor.

Q. And that is an appointment that is in the clinician educator line at Stanford School of Medicine; correct?

A. Correct.

Q. Okay. If you turn to Exhibit 11, this web page, this section, is titled "3.7.D. Conflicts of Interest and Commitment."

Do you see that?

A. I think you said Exhibit 11, but you're referencing Exhibit 10 right now?

Q. What do you have as Exhibit 10? Sorry.

A. "Conflicts of Interest and Commitment."

Q. Okay. So then I was confused.

Okay. So we were just looking at Exhibit 11 to confirm that you are in the clinician educator line; correct?

A. Correct.

Q. Okay. So now let's look at Exhibit 10. This is Section 3.7.D, "Conflicts of Interest and Commitment."

Is that right?

A. Correct.

Q. Okay. And the first paragraph of this

section of the Stanford School of Medicine Faculty Handbook states that:

"The Stanford University faculty policy on conflicts of interest and commitment and the policies pertaining to consulting and other outside professional activities by members of the professorate apply to clinician educators."

Do you see that?

A. I do see that.

Q. So do you understand that this conflicts of interest policy applies to you as a clinician educator?

MS. O'NEILL: Objection. Form. Foundation.

THE WITNESS: There also is a consideration that technically I believe I am primarily employed through Stanford Children's Lucile Packard Hospital.

So that might also lead to some differences here.

BY MS. BARNHART:

Q. Dr. Zicherman, do you know that to be true?

Do you know that you are exempt from the Stanford University School of Medicine conflicts of

interest policy?

A. I'm not saying I'm exempt; I would say I certainly would need to review all the documents relating to this thoroughly and think about this and consult with anyone at Stanford that I might need to.

Q. And you have not yet done any of that? You have not done what you need to do to assure yourself that you are exempt from this policy?

MS. O'NEILL: Objection. Form.

THE WITNESS: Well, I'm not saying I'm exempt from the policy. I may have, in fact, disclosed this; but it's something that I think I will have to give, you know, consideration to, of course.

I'm not opposed to disclosing my work, if that is what I need to do, when I have to annually submit my disclosures.

*** MS. BARNHART: Let's mark this part of the transcript for nonresponsiveness.

BY MS. BARNHART:

Q. Dr. Zicherman, I'll give you one more chance here, and let's break this down.

Did you or did you not disclose your work as an expert witness in this litigation to Stanford?

A. I believe I've answered that question.
Q. Then you should answer it again.
A. I would have to check with the OPAC system. I may or may not have.
Q. So sitting here today, you cannot confidently tell me under oath that you have disclosed your work as an expert witness in this litigation to Stanford?
MS. O'NEILL: Objection. Form. Asked and answered.
THE WITNESS: In order to accurately recall, I would have to look at disclosures within the system.
BY MS. BARNHART:
Q. So the answer is no, you do not, sitting here today, recall disclosing your work as an expert witness in this litigation to Stanford?
MS. O'NEILL: Same objection.
THE WITNESS: I do not recall either way whether I disclosed it or did not disclose.
BY MS. BARNHART:
Q. Okay. And is it your testimony today that you are not subject to these conflicts of interest policies?
MS. O'NEILL: Objection. Form.

Mischaracterizes his testimony.
THE WITNESS: That is not my testimony.
BY MS. BARNHART:
Q. Is it your testimony that you are subject to these conflicts of interest policies?
MS. O'NEILL: Objection. Form.
THE WITNESS: My testimony is that I would have to do more research to understand if I, in fact, am subject to these policies.
BY MS. BARNHART:
Q. So you do not know -- sitting here today in this room under oath, you do not know whether or not you are subject to these conflict of interest policies?
MS. O'NEILL: Objection. Asked and answered.
THE WITNESS: Yeah, I feel like I'm providing the same answer, but I would have to do my own research, consult with individuals as necessary at Stanford, to understand, you know, what has to be disclosed or not disclosed.
BY MS. BARNHART:
Q. So no, you don't know?
MS. O'NEILL: Objection. Asked and answered.

BY MS. BARNHART:
Q. Without doing that additional investigation which you've refused to do on a break, you don't know, sitting here today at this deposition?
MS. O'NEILL: Objection. Form. Asked and answered.
THE WITNESS: I don't know in reference with --
BY MS. BARNHART:
Q. You don't know whether or not you are subject to the Stanford conflict of interest policies?
A. I would want to provide an accurate answer. And as of now, I would have to do more research and consult with individuals at Stanford to understand whether or not disclosures have to be made.
Q. Without doing that additional research and consultation, which you have not yet done, you do not know, sitting here today, whether or not you're subject to Stanford's conflict of interest policies?
MS. O'NEILL: Objection. Form. Asked and answered.
THE WITNESS: Yeah, I have been answering this question. I'll answer it the same way. I would have to do my research and consult with

individuals as necessary to understand whether this has to be disclosed or not disclosed.
*** MS. BARNHART: All right. Counsel, you've got to tell your witness to be responsive. He's not answering these questions. This has been a problem from minute one of the deposition.
This is -- you know, we're marking the transcript. We'll take it to the judge if we have to, but this is not responsive testimony.
MS. O'NEILL: He's answering the question to the best of his ability. And that's what he's been doing consistently. And he's giving you an answer.
BY MS. BARNHART:
Q. And I just want the record to be clear, Dr. Zicherman. You are not willing to investigate today whether or not, A, you are subject to these conflicts of interest policies or, B, you have actually complied with them?
MS. O'NEILL: And, again, I don't think he's under an obligation --
MS. BARNHART: You can -- the speaking objections have to stop. You can make an objection. That's not an objection.
///

BY MS. BARNHART:
Q. Go ahead, Dr. Zicherman.
A. This is a process that I would want to do correctly. And in order to do that, again, I would want to do my own thorough research into this matter, consult with individuals as necessary, and determine whether or not I have already or not disclosed this to the necessary individuals.
Q. Okay. So when are you going to complete that process?
A. I don't have a time frame at the moment. I'm not sure how lengthy of a process this will be.
Q. And when you do complete that process, will you let us know the results of your investigation?
A. I don't see any reason I would not be able to do that.
Q. So that's a "yes"? You will? That's -- if I can interpret that double negative, yes, you will let us know the results of your investigation?
A. If Stanford is okay with me disclosing that information, then I believe I wouldn't have a problem with it.
MS. BARNHART: Okay. So we'll make a formal request on the record for any documentation of Dr. Zicherman's disclosure of a conflict of

interest in compliance with the Stanford conflicts of interest policy.
MS. O'NEILL: We may have objections to that, but we can discuss that off the record.
MS. BARNHART: Dr. Zicherman doesn't seem to have any objection.
BY MS. BARNHART:
Q. So do you understand that request, Dr. Zicherman?
A. I understand the request.
Q. All right. In addition to working at Stanford, you're also the medical director for the Quest Intensive Outpatient Program at El Camino Health; correct?
A. Correct.
Q. Is that a part-time position?
A. You can call it a part-time position.
Q. How many hours a week do you -- how many hours per week do you spend on that work?
A. It could be -- it's variable. It could be anywhere -- it could be four to eight hours of work, I would say.
Q. You say in your report that this program at El Camino Health treats people with technology addictions; is that right?

A. That's correct.
Q. Would it surprise you that the website for the Quest Intensive Outpatient Program at El Camino Health does not say anything about technology addiction?
MS. O'NEILL: Objection. Form.
THE WITNESS: I can't recall what the website mentions or does not mention. Whether it mentions it or not, it's something we certainly are treating.
BY MS. BARNHART:
Q. Okay. In addition to your work at Stanford and El Camino Health, you are also a consulting psychiatrist at Alta Mira Recovery center; is that right?
A. Correct.
Q. Is that a part-time position?
A. Yeah, you can call it a part-time position.
Q. How many hours per week do you spend at Alta Mira?
A. It could be -- I'd have to think about an estimate.
I'd say on average maybe two to four hours.
Q. And Alta Mira Recovery center is a residential treatment center specializing in the

treatment of substance addiction disorders for adults; correct?
A. That's correct.
Q. Okay. You don't treat adolescents for social media addiction at Alta Mira; correct?
A. It is 18 and up.
Q. So no services provided at all to adolescents; correct?
A. No. There are no adolescent patients there.
Q. Are you aware that Alta Mira costs $50,000 a week for patients?
A. I am not aware of the financial considerations if someone pays out of pocket, but many insurances are -- have recently been accepted by Alta Mira.
Q. Are you aware that Alta Mira's website indicates that it does not accept any insurance?
A. I'm not responsible for the website. This is also, I believe, a relatively new development.
Q. Is Alta Mira owned by a venture capital company?
A. I am not aware of who actually owns them.
Q. Would it surprise you that they're owned by a venture capital company?

MS. O'NEILL: Objection. Form.
THE WITNESS: Again, I don't know what to expect. I'm not entirely sure who owns Alta Mira.
BY MS. BARNHART:
Q. Prior to moving to the Bay Area, you worked as a psychiatrist at a private for-profit prison company; correct?
A. I did do some work for a company, yes.
Q. That company was NaphCare?
A. Yes.
Q. You worked in Oregon and California jails as part of that role; correct?
A. That is correct.
Q. You provided psychiatry services to prisoners; is that right?
A. That is correct.
Q. Did you ever medicate people against their consent as part of that work?
MS. O'NEILL: Objection. Form.
THE WITNESS: I don't recall that.
BY MS. BARNHART:
Q. Did you ever otherwise provide any medical treatment against prisoners' consent while you worked for NaphCare?
MS. O'NEILL: Same objection.

THE WITNESS: I don't recall providing medications against consent.
BY MS. BARNHART:
Q. Is it possible that you medicated people against their consent and you just don't recall?
MS. O'NEILL: Objection. Form.
THE WITNESS: Can you repeat the question.
BY MS. BARNHART:
Q. Is it possible that you medicated people against your [sic] consent, and you just don't recall?
MS. O'NEILL: Same objection.
THE WITNESS: My recollection is that that was not the case, that I did not provide any medications against the will of patients there.
BY MS. BARNHART:
Q. Did you ever testify at any hearings justifying medication against anyone's consent?
A. I do not believe that was a part of any testimony.
Q. Social media use was not permitted in the prisons you worked in; correct?
A. I don't recall.
Q. Did you ever treat anyone for social media withdrawal when you were working for NaphCare?

A. I don't believe that was a focus of my work with NaphCare.
Q. Was it any aspect of your work at NaphCare?
MS. O'NEILL: Objection. Form.
THE WITNESS: I certainly treated addictions. I don't recall, you know, technology addictions being a substantial part of the work I did at NaphCare.
BY MS. BARNHART:
Q. During what time period did you work at NaphCare?
A. I would have to reference my CV for the exact time frame.
Q. Does January 2019 to January 2020 sound correct?
A. January 2019 to?
Q. January 2020.
A. That sounds roughly correct.
Q. During that time period, are you aware that NaphCare faced several lawsuits claiming inadequate medical treatment at its facilities?
MS. O'NEILL: Objection. Foundation.
THE WITNESS: I'm not aware of any lawsuits that were facing NaphCare.
///

BY MS. BARNHART:
Q. Do you know whether you've been mentioned in any of those lawsuits?
MS. O'NEILL: Objection. Foundation.
THE WITNESS: I do not believe I have been mentioned in any lawsuits.
BY MS. BARNHART:
Q. But you don't know because you weren't aware of those lawsuits; correct?
A. I imagine I would have been informed if I was a part of any lawsuits, and I have not been. So to my understanding, I have not been a part of -- mentioned in lawsuits.
Q. Okay. In your current role or roles, your primary work is clinical practice; correct?
A. Correct.
Q. And I believe, adding up what you've told me before, you spend approximately 40 to 45 hours a week on clinical work across the various clinics you worked in -- work in?
A. That can be an estimate. I mean, of course, week to week, month to month, the work changes. But there are weeks when, sure, I'm seeing maybe 40 hours of patients.
Q. What would a low week be?

A. A low week could be closer to the 20s.
Q. How many patients did you see at the Stanford recovery clinic last week?
A. I don't feel comfortable answering exact numbers of patients. I think that goes into specific patient information.
I mean, I'm happy to give estimates as far as generally what I've seen over a lengthier period of time.
Q. It's your position that the number of patients you saw last week violates HIPAA?
A. Well, I'm not sure if answering a question with that kind of recency would open up any sort of HIPAA violations.
Q. Yeah, but it wouldn't. I can guarantee you it would not.
So are you willing to answer my question?
How many patients did you see at the Stanford recovery clinic last week?
MS. O'NEILL: Object to the preamble.
THE WITNESS: I would say that I have a pretty standard template which involves four new patients roughly per month -- sometimes it's more -- plus follow-ups. I believe that would be consistent with my work this past week.

BY MS. BARNHART:
Q. So how many patients did you see at the Stanford recovery clinic last week?
A. Really, I would have to, unfortunately, probably reference my clinic templates exactly, but if I had to estimate -- I have to think about this.
You know, I hope I'm estimating this accurately. It's probably around maybe 15 to 20 patients.
Q. Just last week you saw 15 to 20 patients?
A. I think that's an accurate estimate.
Q. Okay. Of those 15 to 20 patients, how many have you diagnosed with social media addiction?
A. You know, I'm trying to recall, you know, exactly my patient load last week. But I would say it was no different from a typical patient load, where, you know, at least half of the patients I work with had concerning social media use habits.
Q. And are you -- do you specifically recall the 15 -- the 8 to 10 patients you saw last week that have, in your words, specific -- excuse me -- concerning social media use habits?
A. I see lots of patients. To jog my memory, the only way to really do that would be to look at my actual clinic template.

Q. So you can't recall off the top of your head the specific nature of your work with patients just last week?
MS. O'NEILL: Objection. Form. Asked and answered.
THE WITNESS: I would have to jog my memory and look at my actual workflow from the previous week.
BY MS. BARNHART:
Q. In addition to your clinical work, do you spend time on research?
A. I do spend some time on research.
Q. How much time per week do you spend on research?
A. Maybe one to three hours, if I had to estimate.
Q. Is all of that time spent on the ScreenSense survey research?
MS. O'NEILL: Objection. Form.
THE WITNESS: Not all of it.
BY MS. BARNHART:
Q. What other research are you working on?
A. Well, I might have to review a proposal for a research project from a child and adolescent psychiatry fellow, for instance. Projects like that

come up from time to time, and I would be involved in a research estimate.
Q. Okay. So that's not your research; that's a research project that a fellow is working on that you might review?
A. Well, I would potentially be a lead supervisor on a project, for instance.
Q. Okay. The only specific research project you mentioned in your report is the ScreenSense survey.
Are there any other specific projects you're actively working on at the moment?
A. That's the active project that I'm working on at the moment.
Q. Okay. And, in fact, the ScreenSense survey is not active; right? It's currently in IRB review?
A. It is currently in IRB review.
Q. When did you first submit it in the IRB process?
A. I believe it was maybe two months ago. It might have been longer. Actually, I believe it was longer.
Q. When do you think you submitted it?
A. I really can't recall. I think it was at least several months ago, honestly, in thinking

about it more. But I don't know the exact date.
Q. Would it surprise you that that IRB approval has been pending for almost a year?
MS. O'NEILL: Objection. Form.
THE WITNESS: Oh, that IRB approval has not been pending for almost a year.
BY MS. BARNHART:
Q. Your CV says, "Stanford ScreenSense study currently in IRB review 2024 to present."
So what does that 2024 indicate?
A. 2024 to present? I thought maybe it was months ago. Maybe it was even longer than that. Maybe when I put 2024, we were in the process of thinking about submitting to the IRB, and maybe there was a delay.
But that is my recollection. It could have been months to maybe end of 2024.
Q. Okay. But in any event, that research hasn't actually started because it cannot start until the IRB approval is received; right?
A. There's a lot of work that goes into developing a project before it begins and before it's fully approved by IRB.
Q. But you've not launched the research project? You are not actively surveying anyone

about ScreenSense or doing any other parts of the research?
A. We have not actively been able to survey anyone. We will as soon as it completes the IRB process.
Q. Is it possible that you might not get IRB approval?
MS. O'NEILL: Objection. Form. Calls for speculation.
THE WITNESS: I think that would be very unlikely.
BY MS. BARNHART:
Q. But it's possible; right?
MS. O'NEILL: Same objections.
THE WITNESS: Yeah, I believe that would be extraordinarily unlikely that we would not get approval.
BY MS. BARNHART:
Q. Have you ever conducted empirical -- original empirical research?
MS. O'NEILL: Objection. Form.
THE WITNESS: I have not conducted empirical research.
BY MS. BARNHART:
Q. You've never conducted functional or

structural MRI research; correct?
A. I have not.
Q. You've never conducted research on the release of dopamine in the brain; correct?
A. I have not personally conducted research on how dopamine works in the brain.
Q. Do you know what methods are possible to -- let me start over.
Do you know what methods can be used to directly measure dopamine release in the brain?
MS. O'NEILL: Objection. Form.
THE WITNESS: I think you're asking very neuroscience-specific questions. I believe I have an understanding of how dopamine works at a level of a medical doctor who is working with patients with addictions.
If you're asking for really detailed level questions about how dopamine is measured, reference someone who has a PhD in neuroscience.
BY MS. BARNHART:
Q. And that someone is not you; correct? You do not have a PhD in neuroscience?
A. I do not have a PhD in neuroscience.
Q. So you do not know what methods can be used to directly measure dopamine release in the brain?

MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: I am not familiar with the methods that measure dopamine in the brain.
BY MS. BARNHART:
Q. I believe you said just a little while ago you typically see four new patients per month; is that right?
A. That's a rough estimate. It can sometimes be more if there's a special exception kind of needed to fit into the -- my schedule more quickly.
Q. In your report you say that approximately 25 percent of new intake requests are for technology addiction; is that right?
A. I believe it was 25 to 35 percent that I've referenced. I would like to look at the report to make sure we are accurate.
Q. All right.
If you want to look at Exhibit 1, paragraph 13.
A. Right. So I do say that approximately 25 to 35 percent of my new intake requests are for technology addiction concerns.
Q. Okay. And some subset of those technology addiction concerns relate specifically to social

media; correct?
A. That is correct.
Q. So that's approximately one new intake request per month that you evaluate for social media addiction.
MS. O'NEILL: Objection. Form.
THE WITNESS: That's not always the case. But sure, there are times when, specifically for social media addiction, there's one case that might be seen per month. It is often significantly more than that.
And then also, you know, you have to factor in the patients I see for substance use addictions who often have -- and I say here at least 50 percent of those individuals have concerning social media use habits as well.
So between the patients with substance addictions and the requests I get for working with individuals with technology addiction concerns, it is a substantial part of my practice, working with patients with social media use concerns.
Q. So you don't say anywhere in your report that you often see significantly more than one case of social media addiction per month; correct?
MS. O'NEILL: Objection. Form.

THE WITNESS: Well, again, I've referenced that approximately 25 to 35 percent of my new intake requests are for technology addiction concerns, of which most of those are for social media addiction concerns.
BY MS. BARNHART:
Q. And that would be one per month if you do the math; correct?
A. Sometimes it's one per month. It is often more than that.
Q. It is typically one per month; correct?
A. I don't believe I would say typically.
Q. That's the word you used in your report. You typically see four new patients per month. Approximately 25 to 35 percent of those are for addiction concerns; so 1.5. And some subset of that is social media; right?
MS. O'NEILL: Objection. Form.
THE WITNESS: If you want to say 1.5, I think that's more accurate than saying it's typically 1.
I also would say I think these are conservative estimates, and I absolutely am seeing an uptake in requests to work with patients who have significant social media use addiction concerns.

BY MS. BARNHART:
Q. How did you arrive at these numbers that you state in paragraph 13 of your report?
A. Thinking about my clinic templates and the patients that I treat.
Q. So you just sat down and thought about it?
MS. O'NEILL: Objection. Form.
THE WITNESS: To provide an estimate? Yeah, that's essentially what I needed to do to arrive at this estimate.
BY MS. BARNHART:
Q. Did you go back and review any of your clinical notes or clinical templates to determine how many people you have actually treated for social media addiction?
A. I'm always actively reviewing my notes, and I have an extensive follow-up panel who struggle to actually at times find timely follow-ups because of how busy I am.
So sure, I review my records. And that does inform, in addition to just thinking about my templates, these estimates.
Q. So I'm asking about, for purposes of your report, did you go back and review your clinical notes and your templates in order to arrive at your

opinions about -- that are based on your clinical experience?
A. My -- my opinions on this and my estimates were primarily driven by knowing my clinic templates and having familiarity with my patients who often require very frequent follow-up.
Q. Just a little while ago you couldn't even tell me how many patients you treated specifically for social media addiction last week; right?
MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: I would have to jog my memory to recall exactly what patients I saw last week.
BY MS. BARNHART:
Q. And you would do that by reviewing your clinical notes and templates; correct?
A. Correct.
Q. What is a clinical template, just so I understand what that means.
A. Okay. So when I refer to template, that's what they -- Stanford just refers to as your schedule.
Q. Okay. So separate and apart from the template, which is the schedule, you also have clinical notes for each patient, I assume?

A. Of course.
Q. Okay. And so we're clear, you did not review or rely on any of those clinical notes that you have for each patient in developing your opinions in this litigation; correct?
A. Well, most -- again, close recollection and understanding of my patients, I can't recall exactly which patients I saw last week, but I know my patient panel. And I'm able to estimate based off of knowing my template -- or I should say schedule, and having recollection of patients that I see often very frequently.
Q. That was not my question.
Did you review or rely on any of your clinical notes that you have for every patient when you developed your opinions in this litigation?
A. Well, I'm always referencing notes. It's hard to separate that from -- it's hard to separate that from maybe the question you're asking about providing estimates, again, because I am always reviewing records of my patients.
Q. If you were to -- if you were to ask -- or excuse me.
Do you have any backup -- documentary backup for the claims you're making, the estimates

you're making, in paragraph 13 of your report?
MS. O'NEILL: Objection. Form.
THE WITNESS: I'm not about to disclose patient information which is in, of course, clinical records.
BY MS. BARNHART:
Q. All right. I want you to focus on my question.
My question is not will you give it to me; my first question right now is do you have backup or other evidence to support the claims that you're making in paragraph 13 of your report?
MS. O'NEILL: Same objection.
THE WITNESS: Well, I'm not sure what you mean by "backup."
BY MS. BARNHART:
Q. Do you have any evidence to support the statements that are made in paragraph 13 of your report?
A. Well, the evidence is being able to estimate with a patient population that I know well and frequently have to see for follow-ups because of how sick they are.
Q. So the evidence is simply your memory?
MS. O'NEILL: Objection --

BY MS. BARNHART:
Q. What's inside of your head; correct?
MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: It's not just memory, but I also said that I am reviewing my notes consistently.
BY MS. BARNHART:
Q. Well, that's what I'm trying to understand, Dr. Zicherman. I'm trying to understand are your opinions in this case based on your recall of your clinical experience, or are they also based on these clinical notes and other documentation that you have for each patient?
A. Well, it's hard to separate out the clinical notes from recollection when I see patients every day.
Q. That's not answering my question.
Your opinions here, will you come to trial and say, "These opinions are based on my review of clinical notes and other information I have about each of my patients"?
MS. O'NEILL: Objection. Form.
THE WITNESS: It's fair to say clinical review. But, again, I'm mostly arriving at this space off of a general knowledge of working with my

patients, having a consistent schedule, and working with patients who are so sick that they require very close and frequent follow-up.
BY MS. BARNHART:
Q. So you are not relying on anything written down when developing these opinions?
MS. O'NEILL: Objection. Form. Asked and answered.
THE WITNESS: Having a consistent schedule makes it so that I believe I can accurately provide these -- provide solid estimates without necessarily having to look at the specific notes.
BY MS. BARNHART:
Q. Your materials considered list, which I believe is Exhibit 2 that you have in front of you, that materials considered list does not list any clinical templates or clinical notes; correct?
A. Correct.
Q. And had you considered those materials in developing your opinions, you would have disclosed that to us on your materials considered list; correct?
A. I don't believe I would have disclosed patient records or -- again, I think the question is -- you know, this is what I'm saying.

I predominantly develop my opinion based off of recollection of my schedule and memory of working with patients I see really frequently because they are so sick.

Q. Is your materials considered list a complete and accurate list of all of the materials you considered in developing your opinions for this litigation?

A. I believe it to be accurate.

Q. And these clinical notes and clinical templates do not appear on that list; correct?

A. Correct.

Q. So to the extent you considered your clinical notes or clinical template or relied on those materials, you'll produce those to us; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: I'm not going to provide information relating to specific patients.

BY MS. BARNHART:

Q. Okay. You can talk to your counsel about this, but you are under an obligation as an expert witness in this case to produce all of the materials that you relied upon and considered in forming your opinions.

Do you understand that obligation?

A. I understand that.

Q. Okay. So because you are not going to produce these clinical notes or clinical templates to us, I understand from you that you did not consider or rely on those materials in forming your opinions.

Is that right?

MS. O'NEILL: Objection. Form.

THE WITNESS: I certainly rely on my memory of working with these patients every day. I don't need to look at my notes to recall an estimate of the number of patients I'm seeing or the severity of the illness that they have.

BY MS. BARNHART:

Q. Okay. So you don't need to look at the notes to jog your memory about the patients that you treated last week?

MS. O'NEILL: Objection. Form.

THE WITNESS: The specific patients and names? Sure, I would need to know exactly what time slot my patients were in.

But globally, again, I don't need to reference clinical documents to arrive at an estimate of number of patients I've seen or severity

of the cases.

BY MS. BARNHART:

Q. What is the total number of patients you have seen and diagnosed with social media addiction during your time at Stanford?

A. Well, I think it's fair to extrapolate what I've stated in the report over the course of several years.

Q. Dr. Zicherman, I'll try again.

What is the total number of patients you have seen and diagnosed with social media addiction during your time at Stanford?

A. I would really have to think about that to jog my memory in the moment.

I'm happy to think about that, though.

Q. Yeah, why don't you think about that.

Extrapolating, as you encouraged me to do, based on what you said in your report, I get to 60 patients over the five-year life of the clinic that you've diagnosed with social media addiction.

Does that sound right?

A. Perhaps patients who came in with that as the primary concern, but there have been more patients that have been diagnosed with social media addiction concerns, including patients that I'm

seeing for substance addictions.

Q. And you can't tell me that total number that you have diagnosed with social media addiction over the course of your career at Stanford?

MS. O'NEILL: Objection. Form.

THE WITNESS: Well, I do see lots of patients. It's likely in the hundreds, if I had to estimate.

BY MS. BARNHART:

Q. Okay. I'm going to ask you one more time because I don't think we got a clear record on this.

Did you consider or rely on clinical notes or other documentation in arriving at the opinions that are stated in your report?

MS. O'NEILL: Objection. Asked and answered.

THE WITNESS: Yeah, I didn't need to look at clinical notes to have an understanding globally of the patient population that I'm working with.

BY MS. BARNHART:

Q. Because you didn't need to, that means you did not actually consider or rely on clinical notes or other documentation in arriving at the opinions that are stated in your report?

MS. O'NEILL: Same objection.

THE WITNESS: I didn't have to look at the notes.
BY MS. BARNHART:
Q. I understand you're saying you didn't have to. Did you? Did you look at the notes in forming your opinions?
MS. O'NEILL: Objection. Form. Asked and answered.
THE WITNESS: I don't believe I had to look at my actual notes to form my opinion.
BY MS. BARNHART:
Q. Dr. Zicherman, do you understand that you're not answering my question?
I'm asking did you actually look at them? Not whether you needed to; not whether you had to.
Did you actually consider and rely on your clinical notes or other documentation in forming your opinions in this litigation?
MS. O'NEILL: Objection. Asked and answered.
THE WITNESS: I've relied on my clinical experience, but that involves more than just notes on paper. I have a memory of these patients.
BY MS. BARNHART:
Q. That again doesn't answer my question.

Separate and apart from your memory -- that's a different thing -- did you in this case consider or rely on clinical notes or other documentation in forming your opinions?
MS. O'NEILL: Same objection.
THE WITNESS: And I'm going to provide the same answer. I relied on my clinical knowledge, which involves more than just looking at records of the patients I'm seeing every day.
I see patients very frequently. I'm familiar with my patient panel. I'm able to estimate the number of patients I have and the severity of presentations based off of memory of a consistent schedule.
BY MS. BARNHART:
Q. When you say you relied on your clinical knowledge, "which involves more than just looking at records of the patients I'm seeing every day," does that mean that, as part of your reliance on your clinical knowledge, you did go back and look at records of your patients in forming these opinions?
MS. O'NEILL: Objection. Asked and answered.
BY MS. BARNHART:
Q. I just need a clean answer on this. I'm

entitled to the materials that you considered and relied on in forming your opinions. You're welcome to talk to your --
A. I don't believe I --
Q. Hold on.
You're welcome to talk to your counsel about that, but I am entitled to these materials. If you simply didn't consider them or rely on them, tell me that and I can move on.
But I need a clean answer to this question.
MS. O'NEILL: Objection. Form.
THE WITNESS: I don't believe you're answering -- you're asking a simple question, and I believe the best I can answer is that I relied upon my clinical knowledge, which involves more than just a specific patient encounter and looking at a note.
BY MS. BARNHART:
Q. But you did rely on looking at notes in forming your opinions? Is that what you're saying?
MS. O'NEILL: Objection. Form.
THE WITNESS: That is not what I'm saying.
BY MS. BARNHART:
Q. So you did not rely on looking at notes or other documentation in forming your opinions?
A. I relied on my knowledge of -- schedule and

working with patients I see very frequently who are very sick.
Q. So you did not rely on notes or other documentation in forming your opinions?
MS. O'NEILL: Objection. Asked and answered.
THE WITNESS: Working with patients is important, but that's just one aspect of clinical knowledge.
BY MS. BARNHART:
Q. Do you remember what my question was?
What was my question?
A. I'm happy for you to restate it.
Q. Well, what -- do you remember it?
A. I'd like you to --
MS. O'NEILL: Objection. Argumentative.
THE WITNESS: -- restate the question if you want me to --
BY MS. BARNHART:
Q. Did you rely on notes or other documentation in forming your opinions in this case?
MS. O'NEILL: Asked and answered.
THE WITNESS: I believe I've stated again that I've relied on my clinical knowledge and understanding of the patients I work with.

I don't have to reference the charts, the notes to develop estimates of the number of patients that I see and the kinds of patients I'm seeing.

*** MS. BARNHART: Counsel, this is not a clean answer. We need a clean answer to this.

So I'll put in a formal request for all documents, notes, templates, otherwise that Dr. Zicherman considered or relied on in forming his opinions in this case.

MS. O'NEILL: I'm going to acknowledge your request. I think we can talk separately about this.

MS. BARNHART: Okay.

BY MS. BARNHART:

Q. Dr. Zicherman, if it is determined that you did consider or rely on those materials, will you produce them to us?

MS. O'NEILL: Objection. Form. Calls for a legal conclusion.

THE WITNESS: Yeah, I would have to discuss this with counsel.

BY MS. BARNHART:

Q. Have you diagnosed any patients with generalized technology addiction?

A. With generalized technology addiction? I'm usually more specific.

Q. So you have not diagnosed any patients with technology addiction?

A. To the best of my recollection, if I've diagnosed someone with a specific technology addiction, I will reference that specific addiction concern.

Q. What are some of the specific technology -- well, we'll just go down the list.

Have you diagnosed anyone with internet addiction?

A. That can be a potential diagnosis if someone globally is addicted to the internet, sure.

Q. I'm not asking about potential; I'm saying have you actually diagnosed anyone with internet addiction?

A. I might have referenced that in -- at times.

Q. Did you?

I'm not asking if you might have. Did you actually diagnose anyone with internet addiction in the course of your career?

A. I probably have.

Q. You can't tell me yes or no, I have definitely diagnosed someone with internet addiction?

A. Well, it would be unusual. I think I'm, again, far more likely to diagnose someone with social media addiction or potentially gaming addiction.

Q. Okay. So sitting here today, you cannot specifically recall diagnosing someone with internet addiction?

MS. O'NEILL: Objection. Asked and answered.

THE WITNESS: That's -- I'm generally more specific.

BY MS. BARNHART:

Q. So that's a "no"?

MS. O'NEILL: Objection. Asked and answered.

THE WITNESS: I would have to review notes to recall.

BY MS. BARNHART:

Q. Sitting here today, can you specifically recall diagnosing someone with a smartphone addiction?

A. I -- I may have. I do not recall.

Q. Sitting here today, can you specifically recall diagnosing someone with a television addiction?

A. I may have, but I do not recall.

Q. Sitting here today, can you specifically recall diagnosing someone with a Snapchat addiction?

A. I may have. But, again, I do not recall.

Q. Sitting here today, can you specifically recall diagnosing someone with a TikTok addiction?

MS. O'NEILL: Objection. Form.

THE WITNESS: I believe I have considered that as a diagnosis for some individuals.

BY MS. BARNHART:

Q. Have you actually diagnosed anyone with a TikTok addiction?

A. I cannot recall offhand. I'd have to jog my memory.

Q. Sitting here today, can you specifically recall diagnosing someone with a YouTube addiction?

A. I believe it's likely that I have considered that as a diagnosis.

Q. Have you actually diagnosed anyone with a YouTube addiction?

A. I would have to jog my memory.

Q. Have you actually diagnosed anyone with a Facebook addiction?

A. I do not recall. I'd have to jog my memory.

Q. Have you actually diagnosed anyone with an addiction to dating apps?
A. I don't believe I have diagnosed someone with an addiction to dating apps.
Q. Have you actually diagnosed anyone with an addiction to online shopping?
A. I don't recall if I've diagnosed anyone with an addiction to online shopping.
Q. Have you actually diagnosed anyone with an addiction to texting?
A. I don't recall diagnosing anyone with an addiction to texting.
Q. Have you actually diagnosed anyone with an addiction to email?
A. I don't recall diagnosing anyone with an addiction to email.
Q. Have you actually diagnosed anyone with an addiction to Reddit?
A. I don't recall diagnosing anyone with Reddit addiction.
Q. Have you actually diagnosed anyone with an addiction to Tumblr?
A. I don't believe I diagnosed anyone with an addiction to Tumblr.
Q. Have you actually diagnosed anyone with an

addiction to Spotify?
A. I do not believe so.
Q. Have you actually diagnosed anyone with an addiction to video games?
A. I believe I have considered diagnosis of video games.
Q. Have you actually diagnosed anyone with an addiction to video games?
A. I believe I likely have.
Q. And have you actually diagnosed anyone with an addiction to Instagram?
A. I believe I have used that as a diagnosis.
Q. You have diagnosed someone with Instagram addiction specifically?
MS. O'NEILL: Objection. Asked and answered.
THE WITNESS: Well, I generally will say social media addiction. But sure, I will reference if it is Instagram that is the concerning addiction. I will make note of that.
BY MS. BARNHART:
Q. Okay. So you have not actually diagnosed someone with something called "Instagram addiction"?
MS. O'NEILL: Objection. Form.
THE WITNESS: I think it's fair to say that

I have stated in my notes that someone has social media addictions. And the, you know, predominant addiction or app of choice is Instagram.
BY MS. BARNHART:
Q. So you remember saying that about Instagram; you don't remember saying that about any other social media app?
A. Well, it turns out that the majority of my patients that come in with a social media addiction concern, they're using Instagram, and they identify Instagram as their platform of choice.
Q. Do you remember what my question was?
A. Please restate it.
Q. It does seem like you're having a hard time remembering my questions, which makes me call into question your memory generally.
But I'll say it again.
You don't remember saying anything in your notes about any other social media app besides Instagram?
MS. O'NEILL: Objection. Form.
THE WITNESS: What do you mean by "notes"?
BY MS. BARNHART:
Q. You know what I'm -- clinical notes.
A. My clinical notes?

Q. The clinical notes we've been talking about, yeah.
A. I mean, there are lots of notes here.
Q. Let me ask the question again so it's clear.
What other notes do we have?
A. Well, there are --
MS. O'NEILL: Objection. Argumentative.
THE WITNESS: -- lots of documents here.
(Stenographer interrupted for clarification of the record.)
BY MS. BARNHART:
Q. Okay. Let's start that again.
You testified earlier that when you diagnose patients with social media addiction, you sometimes reference specific apps in your clinical notes for that patient; correct?
A. Correct.
Q. Sitting here today, you don't recall specifically referencing any other app besides Instagram?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, I can't say that's true. Of course, teenagers I work with will use other apps, but Instagram is the predominant app

that I come across in my clinic.
BY MS. BARNHART:
Q. Why don't you mention any of those other apps in your report?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, I believe I was asked to comment about Instagram.
BY MS. BARNHART:
Q. So the scope of your assignment was limited to Instagram; is that correct?
A. Meta-based products which is, I believe, Instagram.
Q. So you didn't form any opinions about Facebook; correct?
A. My opinions are predominantly addressed at Instagram.
Q. Do you have any opinions -- whether predominantly or not, do you have any opinions about Facebook?
A. Well, it's my understanding there might be some similar mechanisms that they use. There might be some similar attempts at safety features. But, again, my opinion is directed at Instagram when that is the predominant platform that the patients I work with are using.

Q. Have you ever been addicted to anything?
MS. O'NEILL: Objection. Form.
THE WITNESS: I don't believe I have addictions.
BY MS. BARNHART:
Q. Okay. Have you ever diagnosed anyone with an addiction to romance novels?
A. I don't believe I've diagnosed anyone with an addiction to romance novels.
Q. Do you think an erotic fiction addiction is valid?
MS. O'NEILL: Objection. Form. Calls for speculation.
THE WITNESS: It could maybe be considered a behavioral addiction, and I would need to know more about whether it's causing some form of functional impairment.
BY MS. BARNHART:
Q. Are you aware of any literature supporting the idea that erotic fiction addiction is valid?
MS. O'NEILL: Objection. Form.
THE WITNESS: I am not familiar with literature on that. But, again, globally -- I guess, potentially, in theory, it could be a form of a behavioral addiction.

BY MS. BARNHART:
Q. By that logic, could anything in theory be a form of a behavioral addiction?
MS. O'NEILL: Objection. Form. Calls for speculation.
THE WITNESS: I don't believe that would be the case. Again, I think you'd have to provide me with specific examples to fully answer that question.
BY MS. BARNHART:
Q. Can someone be addicted to water?
MS. O'NEILL: Objection. Form.
THE WITNESS: I don't believe that coincides with the clinical application of how we diagnose addictions.
BY MS. BARNHART:
Q. Are you aware that Dr. Anna Lembke has testified in this litigation that water addiction is real?
MS. O'NEILL: Objection. Foundation.
THE WITNESS: Well, there are certain mental health conditions that can lead to someone potentially overconsuming water, and it can be a life-threatening condition.
You know, I don't believe I would

personally consider that within the clinical application of what we have for an addiction disorder.
BY MS. BARNHART:
Q. Okay. So you do not believe that Dr. Lembke's testimony on that point is credible?
MS. O'NEILL: Objection. Form.
THE WITNESS: I don't know her testimony.
BY MS. BARNHART:
Q. Do you believe that someone can be addicted to dancing?
MS. O'NEILL: Objection. Form.
THE WITNESS: It's interesting. Again, I think I would answer that like I would most of these examples, saying is it causing some form of functional impairment?
BY MS. BARNHART:
Q. So as long as something causes functional impairment, that's the sort of marker of an addiction?
MS. O'NEILL: Objection. Form. Mischaracterizes the testimony.
THE WITNESS: I think you can consider that as part of what goes into an addiction.
///

BY MS. BARNHART:

Q. Okay. But -- so if dancing does not cause a functional impairment, it's not addictive. Is that your testimony?

I'm trying to make sense of it.

MS. O'NEILL: Objection. Form. Mischaracterization.

THE WITNESS: If dancing isn't causing disruptions in one's life, it's not causing -- again, I could describe functional impairment.

But if it's not causing some sort of functional impairment, it's not impacting education, family relationships, sleep schedule, nutrition -- if it's not impacting that, then I'd say it's not an addiction. And if it is, then, you know, you'd have to consider it.

BY MS. BARNHART:

Q. So for someone who's training to be a competitive swimmer, if they don't attend school because they're training for competition or they're attending competitions, and their school performance suffers, is that person addicted to swimming?

MS. O'NEILL: Objection. Form. Calls for speculation.

THE WITNESS: School is just one aspect of

someone's life. In the case of a competitive swimmer, you know, if they need to dedicate time to competitive swimming, and that takes time away from academics but it allows them to thrive and develop a career, then I think you can say perhaps it's not a functional impairment or addiction.

BY MS. BARNHART:

Q. So if a teenager is a social media influencer, and that social media influencing takes time away from academics but allows them to thrive and develop a career, you would say that's not functional impairment or addiction; correct?

MS. O'NEILL: Objection. Form. Mischaracterization. Calls for speculation.

THE WITNESS: I can't sit here and say everyone that uses an app like Instagram as a teenager is going to develop an addiction or problems with it.

Of course, I see lots of problems and lots of addiction concerns every day with who I work with, but there's going to be a spectrum and a range of people who use the product.

BY MS. BARNHART:

Q. You're not an expert in epidemiology; correct?

A. I have an understanding of some epidemiologic concepts, but I'm not an epidemiologist.

Q. And you're not an expert in epidemiology; right?

A. Sure. I don't have a PhD in epidemiology. I have an understanding, I'd say, consistent with a medical doctor who works with patients daily.

Q. And that's not epidemiology, right? Working with patients daily is not the field of epidemiology?

A. Well, I believe that clinical work absolutely can inform epidemiology. But, again, I'm not an epidemiologist; I'm a medical doctor.

Q. Okay. You're also not a statistician; correct?

A. I do not have a degree in statistics. But, again, as a medical doctor, you have to have pretty high-level understanding of statistics to interpret literature. And I think that helps to inform what is going on clinically when we work with patients.

Q. In this case you are not holding yourself out as an expert in epidemiology or statistics; correct?

A. Yeah, I'm not -- I do not have a PhD in

epidemiology or statistics.

Q. Are you familiar with Bradford Hill analysis?

A. I have come across the Bradford Hill analysis. Don't ask me questions about it. I would need to review it beforehand.

Q. Have you ever performed a Bradford Hill analysis?

A. I have not formally performed a Bradford Hill analysis.

Q. You don't have a degree in public health; correct?

A. I do not.

Q. You don't have a degree in computer science; correct?

A. I do not.

Q. You don't have any training in software engineering?

A. I do not.

Q. And you don't hold yourself out as an expert in technology app design; correct?

A. I -- sure, I do not consider myself an expert in the nuances and technicalities of app design.

Q. You've never designed an app of any kind;

right?
A. I have not.
Q. You've never designed an algorithm?
A. I have not.
Q. Have you ever worked at a social media company?
A. I have not.
Q. Have you ever worked at a tech company?
A. I have not.
Q. Has your wife ever worked at a social media company?
A. I don't believe so.
Q. You don't consider Salesforce to be social media?
A. I mean, they have a -- they have social media, but I don't believe they would be considered a social media platform or company.
Q. Who's paying you for your expert opinions in this case?
A. I am paid for by a pact of several states.
Q. How many states?
A. There are several. To most accurately answer the question, I would need to reference my report, which lists all the states that are involved in the suit.

Q. Does 29 sound right?
A. That could be correct.
Q. Offhand, you don't know the identity of all 29 of those states, do you?
MS. O'NEILL: Objection. Form.
THE WITNESS: I know the identity of several states, but I would have to look at my report again to refresh my memory what specific states.
BY MS. BARNHART:
Q. When were you first retained in this case?
A. I don't recall when we had a formal agreement in place.
Q. Was it in 2025 or before 2025?
A. I believe it was before 2025. I could be wrong as far as formal agreements, but I believe it was before 2025.
Q. Okay. We can look at your invoices in a little bit to help jog your memory, but were you first contacted -- how far -- let me put it this way:
How long after you were first contacted did you set up the formal agreement?
A. I believe it was many months after I was first contacted.

Q. Do you remember when you were first contacted about this case?
A. I do not.
Q. Do you remember who first contacted you?
A. I do not.
Q. Did a lawyer contact you?
A. I believe it was an attorney, yes.
Q. Do you remember what you discussed at that first meeting?
A. I do not remember the details of the meeting.
Q. Why did it take many months after that first meeting before you agreed to serve as an expert in this case?
MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: I don't recall the specifics of what actually led to the formal agreement at the specific time that it happened.
BY MS. BARNHART:
Q. Did you orally agree to serve as an expert witness during that first meeting?
A. I don't recall that.
Q. Which lawyers or lawyer have you primarily communicated with during the course of your

engagement?
MS. O'NEILL: Objection. Form.
THE WITNESS: There have been several, including Megan O'Neill.
BY MS. BARNHART:
Q. Who else besides Ms. O'Neill?
A. I would say Ms. O'Neill was the primary point of contact and consistent throughout the meetings.
Q. Do you understand what state Ms. O'Neill represents?
A. Yes.
Q. Which one?
A. California.
Q. And do you know how Ms. O'Neill identified you as a potential expert witness in this case?
A. I am not aware.
Q. You are working with the consulting firm Bates White in this litigation; correct?
A. Correct.
Q. What is Bates White?
A. It's my understanding they're a consulting firm.
Q. Did you have any preexisting relationship with Bates White before this litigation?

A. I did not.
Q. How did you connect with Bates White?
A. I believe the connection was through the attorney generals.
Q. Okay. So you did not choose to work with Bates White; you were assigned to work with them?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, I was asked if it would be helpful to have assistance --
MS. O'NEILL: And I'll just object and instruct the witness to not divulge the substance of communications between attorneys and you.
THE WITNESS: Okay.
I've been advised not to answer that question by counsel.
BY MS. BARNHART:
Q. Well, what's protected is the substance of draft reports; it's not any communication.
So I'm asking you about why you decided to work with Bates White. Can you tell me more about that.
Did you do anything to learn anything about Bates White before you decided to work with them?
MS. O'NEILL: Objection. Form.
THE WITNESS: I am very busy clinically

working with patients every day. I think to develop the report to the best of my abilities, it was helpful to work with a consulting firm.
BY MS. BARNHART:
Q. What did Bates White do in connection with supporting your -- your work in this case?
A. This is my report. I absolutely had the ultimate direction of the report. They helped organize the report, the drafting, the appendix materials. They helped with grammatical choices and with my -- again, under my direction. They assisted with research reviews when I found it necessary and helpful.
Q. What are the credentials of the people at Bates White that you worked with?
A. I believe that the main individuals I worked with both have PhDs.
Q. PhDs in what?
A. I believe one is psychology. The other one -- I don't want to misspeak -- I believe a PhD in economics. I could be wrong.
Q. What are the names of the people that you worked with at Bates White?
A. Mathis -- Mathis Wagner, I believe, and Angela Rockwell.

Q. Do you recall when exactly you began working with Mr. Wagner and Ms. Rockwell?
A. I do not recall the exact dates when I started working with them.
Q. Do you recall approximately what month or season of the year?
A. I can't recall offhand without jogging my memory and looking at documents.
MS. BARNHART: Well, why don't we go ahead and mark those documents, the invoices.
MS. O'NEILL: Yes. And, Counsel, I'll just note we've been going for over an hour. So if there's a moment that's a good time for a break.
MS. BARNHART: Yeah, if we can go -- let's not mark those yet. Let's just go five or ten more minutes.
MS. O'NEILL: That's fine, yeah, if that works for you.
THE WITNESS: Sure.
BY MS. BARNHART:
Q. Okay. Do you know the rates of the individuals at Bates White who assisted you in preparing this report?
A. I do not.
Q. Do you know how much money Bates White has

been paid in connection with their assistance to you?
A. I do not.
Q. Are you aware that several other paid plaintiffs' experts are also working with Bates White in connection with this litigation?
MS. O'NEILL: Objection. Foundation.
THE WITNESS: I have limited knowledge about their involvement with other experts.
BY MS. BARNHART:
Q. What is that knowledge?
A. That they may work with other experts. That's really all I know. I really don't know much more beyond that.
Q. Are you familiar with Dr. Mitch Prinstein?
A. I am familiar with -- with the name.
Q. Are you aware that he's a paid plaintiffs' expert in this litigation?
A. I am aware that he is a plaintiff.
Q. He's a plaintiff?
A. Sorry. A paid plaintiff expert.
Q. Okay. And are you aware that Dr. Prinstein is working with Bates White as an expert?
A. I might have been informed of that at some point, or it might have come across my knowledge

stream at some point.
Q. Are you familiar with any of Drs. Melissa Hunt, Lauren Hale, Parker Houston, or Ravi Iyer?
A. I might be familiar with those names if you gave me some context. But offhand, it doesn't ring a bell.
Q. Okay. Are you aware that each of those four individuals is also a paid plaintiffs' expert in this litigation?
A. I am not.
Q. Are you aware that each of those paid plaintiffs' experts are also working with Bates White in connection with this litigation?
A. I am not.
Q. Do you know how much money Bates White has made across all six experts it's supporting in this litigation?
A. I am not aware.
Q. Would you be interested to know how much money Bates White has made off of this litigation?
MS. O'NEILL: Objection. Form.
THE WITNESS: It doesn't really matter to me.
BY MS. BARNHART:
Q. Why not?

MS. O'NEILL: Objection. Form.
THE WITNESS: It's no impact on the work that I've done.
BY MS. BARNHART:
Q. You don't think that Bates White has any sort of bias given their work with six different paid plaintiffs' experts in this case?
MS. O'NEILL: Objection. Form.
THE WITNESS: I don't believe so. I'm not familiar with the specific work they've done with other plaintiff experts.
BY MS. BARNHART:
Q. All right. Let me ask you just a couple more questions, and then we can take a break.
How much time did you spend preparing for this deposition?
A. I would have to reference invoices. If you give me a minute, though, I can try and estimate this.
MS. BARNHART: That's okay. We can just do it when we go through the invoices.
Let's just take a break.
THE WITNESS: Okay.
THE VIDEOGRAPHER: Stand by.
The time is 12:38 p.m., and we're going off

the record.
(Luncheon recess taken.)
THE VIDEOGRAPHER: The time is 1:35 p.m., and we are back on the record.
(Exhibits 12, 13, and 14 were marked for identification and are attached to the transcript.)
BY MS. BARNHART:
Q. Dr. Zicherman, I'm handing you what's been marked as Exhibits 12, 13, and 14. These are your invoices that you have created in the context of this litigation; correct?
A. That appears correct.
Q. If you look first at Exhibit 12, the first entry on here is December 24th, 2024.
Do you see that?
A. Yes.
Q. Does that refresh your recollection of when you entered into a formal engagement in this matter?
A. There might have been a formal engagement before, and then there might have been a pause before I did actual work relating to the case.
(Whereupon Paul Schmidt entered the deposition room.)
///

BY MS. BARNHART:
Q. Okay. You didn't do any work before Christmas Eve 2024; correct?
A. I don't believe I did any work that would be considered before the contract which, you know, was established. I'd have to look, but before this date at some point.
Q. Do these three invoices reflect all the work you've done in this case?
A. I believe they reflect the work that I've done in this case, yes.
Q. Is your billing rate $500 an hour?
A. That is correct.
Q. So if you add up all of the amounts billed across all three of these invoices, that totals $42,500.
Does that sound right?
A. Sounds accurate.
Q. And that works out to 85 hours total that you've spent on expert witness work in this litigation; correct?
A. (No audible response.)
Q. Dr. Zicherman, 85 times $500 is 42,500.
Do you dispute that?
A. Appears correct.

Q. All right. If you look at just the time billed prior to May 16th, which was the date of your opening report, I add that up to 70 hours.

Were those 70 hours all spent researching and drafting your opening report?

A. That time would be spent researching and organizing the report.

Q. Your opening report is 25 pages. So that works out to almost three hours per page that you spent?

MS. O'NEILL: Objection. Form.

THE WITNESS: I don't believe that would be a good way of looking at the work performed.

BY MS. BARNHART:

Q. Do you dispute the math?

MS. O'NEILL: Objection. Form.

THE WITNESS: I don't dispute what I've billed for.

BY MS. BARNHART:

Q. All right. So you spent about three hours per page of your report.

Do these invoices reflect time billed on other matters for which you're serving as an expert witness?

MS. O'NEILL: Objection to the preamble.

THE WITNESS: Can you repeat the question.

BY MS. BARNHART:

Q. Do these invoices reflect any time you've billed on other related matters for which you're serving as an expert witness?

A. So in addition to researching and report drafting? Is that the question?

Q. You understand, Dr. Zicherman, that you've also been disclosed as an expert witness in litigation brought by the Commonwealth of Massachusetts?

A. Correct.

Q. Do these invoices, Exhibits 12, 13, and 14, reflect the work that you've performed in connection with that expert engagement?

A. I believe they reflect the work that I performed for the engagements.

Q. Okay. So you haven't issued separate invoices to Massachusetts for expert work performed?

A. I've not issued separate invoices.

Q. Okay. And you issued these invoices to Ms. O'Neill; is that correct?

A. That is typically who the invoice goes to.

Q. And you're paid by the State of California?

A. I would have to reference the check, but

I -- it might be the State of California. I know there are other states involved with the lawsuit.

Q. You haven't received payment directly from the Commonwealth of Massachusetts, have you?

A. I would have to look and see if the checks were from the State of Massachusetts, but I don't believe that was the case. But I would have to reference that.

Q. Did you consult or meet with Bates White during the drafting process for your report?

A. During the drafting process, I did.

Q. And none of your time entries reflect any meetings with Bates White; is that correct?

MS. O'NEILL: Object to form.

THE WITNESS: Some of that time might be in these invoices.

BY MS. BARNHART:

Q. Okay. That wasn't my question.

My question was whether any of these invoices reflect any time entries relating to your meetings or consultations with Bate White -- Bates White.

A. I believe that some of these references might have included time spent with meeting with Bates White.

Q. How often did you meet with Bates White?

A. If I had to estimate, I -- it depends on where I was in the report drafting and research process. It could have been monthly to several times a month.

Q. How many hours total did you spend meeting with Bates White in connection with your preparation of your expert report?

A. I do not recall exactly how many hours I spent in that capacity.

Q. Was it more than 15 hours?

A. Was it more than 15 hours?

That could potentially be accurate. You know, there were lots of meetings and lots of work performed on the case. I, you know, would have to really jog my memory to think about that.

But that might be a fair estimate.

Q. How would you jog your memory?

A. Thinking longer about how long I spent with Bates White. But I would say the 15 hours is fair.

Q. Okay. And did you separately meet with Ms. O'Neill or any other lawyers during the drafting process?

A. There might have been a meeting. I cannot recall.

Q. Did Ms. O'Neill offer you any direct feedback on the draft report?

MS. O'NEILL: I'm going to object to the extent that this calls for --

BY MS. BARNHART:

Q. You can say yes or no.

MS. O'NEILL: -- privileged information.

THE WITNESS: Sounds like I've been instructed to not answer that question by counsel.

MS. BARNHART: I don't think that's right.

Is that right, Ms. O'Neill? Are you instructing the witness not to answer?

MS. O'NEILL: Can you repeat the question, please.

BY MS. BARNHART:

Q. Did Ms. O'Neill -- this is a yes or no; I don't want to know about the substance.

But did Ms. O'Neill offer you any direct feedback on your draft report?

MS. O'NEILL: You can answer.

THE WITNESS: I believe there was -- there's been feedback about the report-drafting process.

BY MS. BARNHART:

Q. From the lawyers?

A. Sure. The lawyers have been able to review the drafts.

Q. And have they provided substantive edits to your report?

MS. O'NEILL: Objection. I'm going to instruct the witness not to answer this. This is getting into privileged information.

THE WITNESS: I've been instructed by counsel not to answer the question.

BY MS. BARNHART:

Q. And you're following that instruction?

A. Yes.

Q. Who wrote the first draft of your report, the very first one?

A. Well, I've been responsible for the draft writing. I cannot recall if Bates White was involved in the first draft or not offhand.

Q. Is it your testimony that you wrote the original draft of the report?

You typed the words of the original draft of the report?

MS. O'NEILL: Objection. Form.

THE WITNESS: Well, I've been responsible for all forms of the draft. And I cannot recall if Bates White was a part of the first draft report.

BY MS. BARNHART:

Q. Did Bates White write any sections of your report?

A. They assisted with language; but the drafting was ultimately my words, my thoughts. And sure, at times they helped with sentence structure, paragraph structure, grammatical choices.

Q. Is your primary income through your clinical practice?

A. That would be correct. That's my primary income.

Q. What was your income in 2024, total income?

A. I do not know.

Q. Do you have any ballpark estimate?

A. I really am not sure how much I made in total in 2024. It depends how accurate you want me to get.

Q. I want your best estimate, which is what I'm entitled to.

A. Okay.

MS. O'NEILL: Objection. Form.

THE WITNESS: I'll just have to think about that for a minute.

This is 2024?

///

BY MS. BARNHART:

Q. Correct.

A. Somewhere in the 300,000 range.

Q. And that was $300,000 from your social media addiction clinical practice?

MS. O'NEILL: Objection. Form.

THE WITNESS: Sorry. Can you -- are you asking for my primary income from Stanford or all the work that I've done in 2024?

Can you repeat that.

BY MS. BARNHART:

Q. Well, you tell me. $300,000 was your total income in 2024; correct?

A. In that range in 2024.

Q. Okay. And how much of that came from your work at the Stanford recovery clinic?

A. Maybe 75 percent of that.

Q. Okay. And then the rest came from your other clinical practices at El Camino Health and Alta Mira?

A. Correct.

Q. And all of your practices except for Alta Mira relate to addiction -- youth addiction; correct?

A. Well, they all relate to addiction; but

yes, the clinical practice at Stanford and El Camino are in relation to youth addiction.

Q. Okay. And as you state in your report and as you've told me repeatedly today, you treat adolescents that you believe suffer from social media addiction; correct?

A. That's correct.

Q. Does your compensation depend on the number of patients you see?

A. Through what entity?

Q. Well, let's start with Stanford.

If you see more patients at the recovery clinic, do you make more money at Stanford?

A. I have a salary. It's not going to be dependent off of -- my salary is not going to be dependent off of patient value. I mean, I have expected target goals, but that's -- it's not a situation where, you know, I'm going to see more patients; I'm going to get more money.

Q. What are your expected target goals at Stanford?

A. So we work off of -- it's called an RVU system. It's very complicated. It essentially equates how we bill to a certain number or fraction of a number. And those patient encounters equate to

a certain overall RVU number that I'm supposed to roughly reach.

Q. What happens if you do not meet the RVU?

A. I'm not sure. I haven't been in that situation.

Q. What happens if you exceed the RVU? Do you get a bonus?

A. There are bonuses that Stanford provides. I'm not entirely sure the metrics that they use to provide those bonuses.

Q. Have you received a bonus from Stanford in addition to your salary?

A. I do receive bonuses from Stanford.

Q. And you understand that that bonus is tied to that RVU number and whether or not it's surpassed?

MS. O'NEILL: Objection. Form.

THE WITNESS: I don't actually believe that to necessarily be true. I think there's several metrics that Stanford uses to determine whether we receive a bonus or not.

BY MS. BARNHART:

Q. You're not tenured; right?

A. I don't believe the clinical track is considered tenured.

Q. Okay. So you only have a five-year term in the current position you're in; correct?

A. That's a way of looking at it.

Q. Right. You're only guaranteed a five-year position. That's the contract you have with Stanford?

A. I believe that the contracts at Stanford are, like, a five-year renewal system.

Q. Is it fair to say in order to get your contract renewed, you would need to show, you know, growth to your clinic -- clinical practice?

MS. O'NEILL: Objection. Form.

THE WITNESS: I -- I'm sure there are a lot of factors that go into what it means to be retained and promoted.

BY MS. BARNHART:

Q. Do you agree that if a judge or a jury were to reject your views on social media addiction in this case, that could hurt your reputation and therefore your clinical practice?

MS. O'NEILL: Objection. Form. Calls for speculation.

THE WITNESS: Whatever happens in front of a judge or jury, I know what I see every day in clinic. I treat very sick kids who I believe are

afflicted with social media addictions. That's not going to change based on an outcome of a case.

BY MS. BARNHART:

Q. That wasn't my question.

I was -- my question was if a judge or a jury rejects your views on social media addiction and appropriate treatment for that purported addiction, that could hurt your reputation.

Do you agree with that?

MS. O'NEILL: Same objection.

THE WITNESS: You know, regardless of outcome of a case, I have these patients coming to me. I have lots of patients, parents who are requesting evaluations due to social media concerns.

And regardless of outcome, if, you know, a trial ended up in a certain direction, I do not believe that would affect my clinical practice, and I will continue to treat these kids who I see that are very sick.

BY MS. BARNHART:

Q. If a judge or a jury were to endorse your views on social media addiction, could that benefit your reputation?

MS. O'NEILL: Objection. Form. Calls for speculation.

THE WITNESS: I think that would involve speculation. I'm not sure.
BY MS. BARNHART:
Q. You certainly don't think it would hurt your reputation if a judge or a jury endorsed your expert views in this case?
MS. O'NEILL: Objection. Form.
THE WITNESS: It probably wouldn't hurt. I think that's fair.
BY MS. BARNHART:
Q. If you can turn to your report, Exhibit 1 that we were looking at earlier, and specifically Section I.A, this is your summary of opinions.
Are you there?
A. Yes.
Q. Is this a complete list of the opinions that you seek to present at trial in this case?
A. Correct.
Q. So you won't present any opinions at trial other than the four you've listed here; correct?
A. These are the opinions that I have.
Q. If you look at Section I.E. of your report -- this is on page 6 -- this section is titled "Meta's alleged unfair and deceptive practices."

Do you see that?
A. I do see that.
Q. You're not offering any expert opinion on whether any of Meta's acts or practices were unfair; correct?
A. I don't believe I reference "unfair" in my opinions, but this is my understanding of the alleged unfair and deceptive practices.
Q. Well, you don't describe any specific practices here. I'm just trying to get a sense of what the scope of your opinions is.
So I understand you are not offering any expert opinion on whether any of Meta's specific acts or practices were unfair; is that true?
A. Well, if you consider unfair be harm that is caused, in my opinion -- my clinical opinion, by the app, then it's certainly linked.
Q. You don't have any expert opinion on what constitutes unfair, unconscionable, or deceptive acts or practices under the law; correct?
A. I think I would prefer to answer that by looking at the specific laws that you might be referencing; but, again, my opinion globally would be that there are -- we'd agree there are unfair and unconscionable acts involved in how Meta has

deployed the Instagram app.
Q. Well, you don't even know what laws I'm referencing; right? You're not a legal expert. You don't understand what the law requires; right, Dr. Zicherman?
A. I'm not --
MS. O'NEILL: Objection. Form.
THE WITNESS: I'm not a legal expert.
BY MS. BARNHART:
Q. Okay. So you're not going to offer any legal expert opinions on what constitutes an unfair, unconscionable or deceptive act or practice under the legal standard?
A. Perhaps from a legal perspective. I will offer that from a clinical perspective.
Q. Let's look at paragraph 19 of your report, which is under "Assignment and materials considered."
Your assignment was to opine on the effects of excessive use of social media.
Do you see that?
A. Yes.
Q. What is excessive use of social media?
A. Sorry. You're referring to paragraph 19?
Q. Correct.

A. Okay. And which sentence?
Q. The very first one.
"I was retained by plaintiffs to opine on the effects of excessive use of social media, including Instagram."
A. And then what is your question in relation to that again?
Q. What do you mean by "excessive use"?
A. Well, excessive use, to me, ties into -- I've used this term before today -- the idea of a functional impairment. Excessive use could potentially be different amounts of use.
But essentially it means that excessive use is causing functional impairment; some form of harm in a child or teenager's life, whether it's related to academic achievement, relationships with family, the ability to get good, restful sleep, among other considerations.
Q. So you can't make a determination of what -- let me start over.
You can't make a determination of whether a teenager is excessively using social media based simply on the amount of time that they use social media every day; correct?
MS. O'NEILL: Objection. Form.

Mischaracterization.

THE WITNESS: Time is one element that certainly goes into the clinical evaluation process.

BY MS. BARNHART:

Q. If all you knew was that a teenager was spending one hour per day on Instagram, you would not be able to determine whether that was excessive; correct?

MS. O'NEILL: Objection. Form. Incomplete hypothetical.

BY MS. BARNHART:

Q. Under your definition.

A. That I would -- the only information I would have is one hour. I mean, that's a hypothetical that I think would be just not possible to answer; but if that's all that I had in front of me, that they were just using one hour of use, I would need to know more information.

Q. Okay. The same goes for if all you knew was that a teenager was spending three hours per day on Instagram, you would not be able to determine whether that was excessive under your definition?

MS. O'NEILL: Same objections.

THE WITNESS: I would still need to know more details about the specific case to comment on

that.

BY MS. BARNHART:

Q. Okay. I want to talk about the methodology that you used to arrive at your opinions. Can you describe that methodology for me?

A. Methodology that I used to arrive at my opinions?

It's based, first and foremost, on the clinical practice and treating for years patients who have serious problems associated with their use of social media platforms like Instagram.

Q. And is that a complete statement of your methodology is your clinical practice?

A. Clinical practice. Of course, I am a medical doctor who has been practicing for many years and working with addictions for many years.

I've reviewed lots of material relevant to the idea of addictions and social media addictions. And the combination of clinical practice as a medical doctor reviewing the preponderance of the material available has led me to my decisions and opinions.

Q. All right. Well, I'm going to need to break that down.

But first I want to clarify. Is it your

testimony that you have reviewed a preponderance of the material available on the question of the effects of excessive use of social media, if any?

MS. O'NEILL: Objection. Form.

THE WITNESS: I have reviewed thousands of pieces of material relating to this topic.

BY MS. BARNHART:

Q. Well, I can -- I will note, if you want to take a look at Exhibit 2, which is your materials considered list, there's only 43 books and academic papers listed on this.

Does that surprise you?

MS. O'NEILL: Objection. Form.

THE WITNESS: Can you repeat that, please.

BY MS. BARNHART:

Q. Well, I'm confused. You said you've reviewed thousands of pieces of material relating to this topic. There are not thousands of pieces of material listed on your materials considered list; correct?

A. I listed and used materials that I believe, of the thousands that I have reviewed, would be relevant to this case.

Q. So you did not -- earlier I asked you is your materials considered list a complete and

accurate statement of the materials that you've considered in developing your opinions in this case?

A. I -- okay. I will rephrase and say --

Q. And let me finish my question.

Earlier you testified that yes, it was. So are you now changing that testimony?

MS. O'NEILL: Objection. Form.

THE WITNESS: I have reviewed thousands of materials over the years, including prior to being retained on this case. I have not reviewed thousands of documents since I was retained in 2024; but, in sum, I have reviewed a substantial amount of information on this subject.

BY MS. BARNHART:

Q. Do you understand it's your obligation to disclose all of the materials that you considered in relying -- in developing your opinions in this case?

A. I developed my opinion in relation to this case specifically off of the materials that I have listed.

Q. All right. I just wanted to be clear on that.

Okay. So let's take this one part at a time.

First, you've got -- first and foremost,

your clinical experience is the basis for your opinions?

A. Yes.

Q. Okay. We'll talk a bit more about that in a little bit.

But is it true that you based your opinions in some small part on other materials, including academic research studies?

MS. O'NEILL: Objection. Form.

THE WITNESS: Sure. I have based my opinions also on research studies. Again, the essence, the -- what's the word I'm looking for? -- the preponderance of my opinion is based off of my clinical experience.

BY MS. BARNHART:

Q. We'll come back to that, but I want to focus first on the methodology you used to identify research studies or other documents that form the basis of your opinions, if any.

If the answer is ever "No, I didn't consider those materials and they didn't form the basis of my opinions," please just tell me. That will speed this along.

So what methodology did you use to determine what research, studies, or other documents

to review?

A. Sure. I didn't do a systematic review or a meta-analysis of the studies. And after I was retained, in order to develop the report, I referenced in this -- in this report the studies and materials that I felt were most relevant to supporting my opinions.

Q. So how did you identify the studies if you did not conduct -- I mean, did you run search terms? How did you identify these studies that you relied on?

A. There were searches. I did reference that in the report. Some studies were just from my own knowledge. Some were in conjunction with Bates White helping with -- assisting with a literature review on topics that I would direct.

Q. Did Bates White identify the sources that are listed on your materials considered list under books and academic papers?

A. They identified -- helped to identify some sources with my direction.

Q. What direction did you provide?

A. It would be different for different parts of the report, but there have been examples, I'm sure, throughout the report where there was a

thought that I would have and I would ask Bates White to help search for a paper that either I knew existed or I had encountered previously.

Q. Did the lawyers ever help you identify any pieces of literature to consider?

A. I --

MS. O'NEILL: Objection. I'm going to instruct the witness not to answer on the basis of privilege.

THE WITNESS: Okay. I've been instructed not to answer that question by counsel.

BY MS. BARNHART:

Q. Did the lawyers for the State of California provide you any of the sources that are identified on your materials considered list?

A. I don't recall being provided by the attorneys with research materials in the report.

Q. Did the lawyers provide you search terms to use to identify pieces of literature to consider?

A. I don't recall the lawyers providing me with search terms to use.

Q. Did Dr. Anna Lembke refer you to any particular materials to consider in connection with your report?

A. I do not recall Anna Lembke directing me

towards any materials.

Q. You referenced some search terms that you ran just a little while ago. In paragraph 24 of your report, you note that over 10,000 articles were returned for just one of those searches; is that right?

A. That is correct.

Q. You did not read all 10,000 of those articles; correct?

A. In the moment that I performed that search, I did not read all 10,000 articles.

Q. And, in fact, you only considered 48 books and academic papers in connection with preparing your reports; correct?

A. I felt that I relied on and referenced enough material that supports my opinion, which is primarily based off of my clinical work.

Q. You only considered material that supports your opinion?

A. I have come across studies that might not support my opinion.

Q. You don't list any of those in your materials considered list; right?

A. They aren't relevant to my opinion and what I see every day in my office.

Q. So you don't think they're relevant because they don't support your opinion?
MS. O'NEILL: Objection. Form.
THE WITNESS: I think they are not relevant to what I'm seeing every day in my practice.
BY MS. BARNHART:
Q. Because they don't support your opinions; right? They don't align with your views?
MS. O'NEILL: Objection. Form.
THE WITNESS: They don't align with what's happening to the patients I'm seeing.
BY MS. BARNHART:
Q. So you considered less than 0.5 percent of the articles that you think could be potentially relevant to your opinions; right?
MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: I think I considered certainly enough of the literature and include enough references to support my opinion, which is, again, based primarily off of the work I do as a medical doctor in my practice.
BY MS. BARNHART:
Q. Do you believe that your report provides a representative and balanced subset of the overall

literature?
MS. O'NEILL: Objection. Form.
THE WITNESS: I don't -- can you repeat the question again for me.
BY MS. BARNHART:
Q. Do you believe that the literature that is discussed and cited in your report provides a representative and balanced view of the overall universe of scientific literature on the subject of social media addiction?
MS. O'NEILL: Same objection.
THE WITNESS: I think it is supporting what is actually happening in real life in my office.
BY MS. BARNHART:
Q. That's not my question, Dr. Zicherman.
My question is whether -- you conceded earlier you have come across studies that actually don't align with what you believe is happening in real life; is that right?
A. That's correct.
Q. Okay. But you did not -- you chose not to consider those studies for purposes of developing your report in this case; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, they don't support what

is actually happening in the real world with my patients.
BY MS. BARNHART:
Q. And so on that basis, you chose not to consider them in your report; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: I did not include them in my report as they did not support what I'm seeing in my office.
BY MS. BARNHART:
Q. Are you familiar with the concept of a consensus report?
A. You can refresh my memory.
Q. Fair to say that a consensus report represents the scientific consensus on a particular scientific question based on a systematic and thorough review of the relevant scientific literature.
A. Okay.
MS. O'NEILL: Objection. Form.
BY MS. BARNHART:
Q. Do you agree with that?
A. Sounds likely accurate.
Q. Okay. You do not list any consensus reports on your materials considered list; correct?

A. I would have to review my materials, but I do not believe it included what you are stating.
Q. Let me give you an example.
Are you familiar with the National Academies of Sciences, Engineering, and Medicine?
A. I have come across that report.
Q. Which report? I didn't mention the report yet.
A. Okay. Well, continue.
Q. No. Go ahead. Which report?
A. Well, I believe you're about to reference a report, but I -- go ahead.
Q. What report did you have in mind?
A. I -- you tell me.
Q. No, that's my question for you. What report did you have in mind just now?
A. I don't know. I can't read your mind, actually, so --
Q. I'm not asking you to read my mind, Dr. Zicherman; I'm asking you what's in your mind.
What report were you just referring to?
A. I believe, to fully answer your question, I should wait to see -- discuss or provide the report that you are about to mention.
Q. Dr. Zicherman, when you testified under

oath "I have come across that report," what report did you have in mind?

A. I -- perhaps I spoke too soon, and I would need to listen to what report you were referencing.

Q. What was in your mind when you said that, Dr. Zicherman?

MS. O'NEILL: Objection. Asked and answered.

THE WITNESS: You're going to have to tell me. I've answered the question.

BY MS. BARNHART:

Q. Did you not have any report in mind when you've said "I have come across that report"?

A. Again, I think to accurately answer the question, I'm going to need to see the report that you might discuss.

Q. Do you remember what my question was?

A. Can you state the question again.

Q. Do you remember what it was?

A. You can refresh my memory.

Q. So that's no, you don't remember what my question was?

MS. O'NEILL: Objection. Asked and answered. Argumentative.

THE WITNESS: If you have a question, I

would like to be able to answer it accurately, which would involve you repeating it.

BY MS. BARNHART:

Q. All right. Listen carefully, Dr. Zicherman.

Earlier today you testified under oath, "I have come across that report."

My question to you right now is what report are you referring to?

A. You know, to answer that question accurately this morning, I would need to reference whatever report you were about to mention.

Q. Dr. Zicherman, this is -- this is what's called being evasive and nonresponsive. And that's -- you know, we'll go to the court on it if we have to.

*** MS. BARNHART: I'll mark the transcript again.

BY MS. BARNHART:

Q. You testified -- I'm asking you about your testimony, not about my questions.

Your testimony was, "I have come across that report."

What did you mean by "that report"?

MS. O'NEILL: Objection. Asked and answered. Argumentative.

THE WITNESS: I believe at this point, to accurately and appropriately answer that question, I would need to hear you state the report.

BY MS. BARNHART:

Q. I don't know what report you were referring to; so I can't do that for you.

A. Or organization, whatever it is. I -- perhaps I spoke too soon.

Q. Okay. We'll try this again.

Here's how it went:

"Are you familiar with the National Academies of Sciences, Engineering, and Medicine?"

That was my question to you.

And your response under oath was:

"I have come across that report."

A. I am familiar with the organization.

Q. What did you mean by "I have come across that report"?

MS. O'NEILL: Objection. Asked and answered.

THE WITNESS: I believe I've answered that question.

BY MS. BARNHART:

Q. You -- I still have no clue what you meant

by "that report" because you refuse to tell me.

Are you willing to tell me what you meant by "that report"?

A. I believe that organization has produced a report on -- in regards to social media.

Q. And have you reviewed that report?

A. I have at one point. I would need to jog my memory to accurately answer questions about it.

Q. I can represent to you it's not listed on your materials considered list.

A. Okay.

Q. Why did you choose not to consider it in connection with developing your opinions in this case?

A. Well, again, I listed materials that I believe supported what I'm seeing every day in my office.

Q. So you believe that National Academies of Sciences, Engineering, and Medicine consensus report doesn't support your views?

MS. O'NEILL: Objection. Form.

THE WITNESS: It might not. I would have to review the report.

BY MS. BARNHART:

Q. Are you generally familiar with the

National Academies?
A. Again, I would have to refresh my memory on who they are and any reports that they might have generated to fully and accurately answer questions about it.
Q. Do you have any reason to dispute that the National Academy of Medicine was established in 1970 to advise the nation on medical and health issues?
MS. O'NEILL: Objection. Form. Foundation.
THE WITNESS: I don't have a reason to dispute that.
BY MS. BARNHART:
Q. Do you have any reason to dispute that members of the National Academy of Medicine are elected by their peers for distinguished contributions to medicine and health?
MS. O'NEILL: Same objections.
THE WITNESS: I have no reason to disagree.
BY MS. BARNHART:
Q. Are you a member of the National Academy of Medicine?
A. I don't believe I am.
Q. Do you have any reason to dispute that the National Academies of Sciences, Engineering, and

Medicine work together to provide independent, objective analysis and advice to the nation?
MS. O'NEILL: Objection. Foundation.
THE WITNESS: I don't know enough about their background to fully comment, but I'll take your word for it.
BY MS. BARNHART:
Q. Do you have any reason to dispute that National Academies Consensus Study Reports document the evidence-based consensus on the study's statement of task by an authoring committee of experts?
MS. O'NEILL: Objection. Foundation.
THE WITNESS: I have no reason to dispute that.
BY MS. BARNHART:
Q. Do you have any reason to dispute that National Academies Consensus Study Reports are subjected to a rigorous and independent peer-review process?
MS. O'NEILL: Same objection.
THE WITNESS: I don't have a dispute there.
BY MS. BARNHART:
Q. And it sounds like you are aware that in 2024 the National Academies of Sciences,

Engineering, and Medicine published a report called "Social Media and Adolescent Health"; correct?
A. I'm aware that they published a report.
Q. Are you aware that the National Academies had open meetings where researchers could present their views on this topic?
MS. O'NEILL: Objection. Foundation.
THE WITNESS: I am not familiar with -- I would have to jog my memory on how they reached any conclusions.
BY MS. BARNHART:
Q. Were you invited to present your views on social media by the National Academies?
A. Not that I'm aware of.
MS. BARNHART: Let's go ahead and mark that report, which should be Exhibit 15.
(Exhibit 15 was marked for identification and is attached to the transcript.)
BY MS. BARNHART:
Q. So, Dr. Zicherman, you have in front of you the 2024 National Academies Consensus Study Report you've been discussing.
If you can turn to the preface at romanette 15 to 16.

Are you there?
A. I believe so.
Q. Okay. Do you see the last paragraph on this page reads:
"The committee recognized that the temptation to draw causal inference and to call for rapid action around social media is strong, and heard during public session from a range of academics and activists who feel strongly that causal links between social media and mental health have been unequivocally established and that there is an urgent need for action."
Do you see that?
A. I see that.
Q. Do you have any reason to dispute that the committee heard from a range of academics and activists who do believe, like yourself, that causal links between social media and mental health have been established?
A. I mean, I don't know exactly who they heard from. I don't know if that includes medical doctors with an addiction training background.
Q. But you have no reason to dispute what I

just said?
A. I simply do not know who the academics and activists were that they heard from during public sessions.
Q. And do you consider yourself to be an activist who feels strongly that causal links between social media and mental health have been unequivocably established?
MS. O'NEILL: Objection. Form.
THE WITNESS: I do not believe I am an activist; I believe I'm here under an ethical and moral obligation to report on harms I'm seeing. But beyond that, I would not say I'm an activist.
BY MS. BARNHART:
Q. You see the committee goes on to write:
"And yet, in careful deliberation and review of the published literature, the committee arrived at more measured conclusions."
Do you see that?
A. I see that.
Q. So, unlike you, the committee did consider a range of opinions on this subject; correct?
MS. O'NEILL: Objection. Form. Foundation.

THE WITNESS: I mean, I don't know whose opinions they relied on. I don't know who they spoke with in regards to this report that was generated.
BY MS. BARNHART:
Q. You have no reason to dispute that they heard from a range of viewpoints about this issue?
MS. O'NEILL: Same objections.
THE WITNESS: I simply do not know. I have no idea if they spoke with experts in addiction, evaluation, and treatment, for instance.
BY MS. BARNHART:
Q. If you go to the page 94. The page numbers are in the upper left.
Are you there?
A. I'm there.
Q. Sorry. I am not. I'm all turned around.
Okay. So if you look at the second full paragraph on page 94, you see that the National Academies wrote:
"The committee's review of the literature presented in this chapter and Appendix C did not support the conclusion that social media causes changes in adolescent health at the

population level."
Do you see that?
A. I do see that.
Q. Are you aware that the committee considered hundreds of studies on this subject in reaching that conclusion?
MS. O'NEILL: Objection. Foundation.
THE WITNESS: I would have to refresh myself on all the studies that they relied upon.
BY MS. BARNHART:
Q. Well, you're welcome to do that by looking at Appendix C if you'd like.
And in the meantime, I'll ask you are you familiar with someone named Megan Moreno?
A. I may be. I would have to jog my memory.
And can I ask what page the appendixes are.
Q. It's at the end, the very end.
MS. O'NEILL: Page 237.
BY MS. BARNHART:
Q. And this is just a subset of what they reviewed.
Would you have any reason to dispute that the committee considered hundreds of studies on this subject in reaching their conclusion?
MS. O'NEILL: Objection. Foundation.

THE WITNESS: I'm still trying to sort through this here.
BY MS. BARNHART:
Q. Well, I'm not asking you to count the number of studies in Appendix C; I'm just asking if you have any reason to dispute that the committee considered hundreds of studies in reaching their conclusion that no causation has been established.
MS. O'NEILL: Objection. Foundation. Calls for speculation.
THE WITNESS: Can you repeat the question. I was looking through this.
BY MS. BARNHART:
Q. Do you have any reason to dispute that the committee considered hundreds of studies in reaching their conclusion that no causation has been established?
MS. O'NEILL: Same objections.
THE WITNESS: They might have reached their conclusions, although I would question who was on their committee and if they had any actual medical doctors treating addictions actively on their committee.
BY MS. BARNHART:
Q. You don't know one way or the other; right?

A. I believe I have looked into this before, and I did not come across anyone with that particular background.

I'm happy to go through this and see if I'm wrong, but I believe I'm accurate in saying that there were not active treating clinicians in the addiction psychiatry space that are actually also focusing on social media addictions.

Q. All right. Well, you can look at Appendix B if you want, but I will represent to you that Appendix B reflects the outside researchers and doctors that the committee heard from, as we discussed earlier.

And Appendix B reflects that the following people presented to the committee: Frances Haugen, Jean Twenge, Jonathan Haidt --

A. Uh-huh.

Q. -- Lauren Hale, Damon McCoy.

Do you understand that all of the people that I just mentioned are paid plaintiffs' experts?

MS. O'NEILL: Objection. Foundation.

THE WITNESS: I don't know everyone who's been retained in this case.

BY MS. BARNHART:

Q. You have no reason to dispute that, though;

correct?

MS. O'NEILL: Same objection.

THE WITNESS: I simply do not know every expert that's been retained.

BY MS. BARNHART:

Q. If you look at page 206 of this National Academies report.

A. Starting to lose track of these pages here. 206?

Q. Correct.

A. Okay.

Q. Are you there?

A. Yes. I just need to organize. Sorry. Okay.

Q. If you look at the second sentence at the very top of the page, it starts:

"Despite widespread public concern about the addictive potential of social media, scientific research on the topic is more guarded."

Do you see that?

A. I do see that.

Q. And then the committee cites four studies, none of which appears on your materials considered list; correct?

A. Were you referencing the study cited, Doucleff, 2023, beginning there?

Q. Correct.

A. I would have to reference, but I do not believe these were in the materials cited.

Q. The committee goes on to say:

"A better understanding of patterns of overuse would be a necessary precursor to any efforts to include discussion of problematic use at the meetings to update diagnostic guides, such as the Diagnostic and Statistical Manual of Mental Disorders."

Do you see that?

A. I see that.

Q. You can put that to the side.

And, again, you don't mention the National Academies report anywhere in your report; correct?

A. Correct.

Q. You do list a book called "Dopamine Nation" by Dr. Lembke on your materials considered list; correct?

A. Correct.

Q. So you chose to read 304 pages of pop

science written by a paid plaintiffs' expert instead of reading a consensus report by the foremost institution on science and medicine in the country; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: I believe that Dr. Lembke's book provides valuable insight into addictions that coincides with what I see every day in my office.

BY MS. BARNHART:

Q. And that is not a scientific, peer-reviewed report, "Dopamine Nation"; correct? That's a book?

A. She might have cited peer-reviewed literature, but it is her book.

Q. You don't know that she cited any peer-reviewed literature; correct?

A. I would have to review --

MS. O'NEILL: Objection to form.

THE WITNESS: I would have to review the references.

BY MS. BARNHART:

Q. And she is a paid plaintiffs' expert in this litigation; correct?

MS. O'NEILL: Objection. Foundation.

THE WITNESS: We've had discussions about that today. It appears to be the case.

BY MS. BARNHART:

Q. Your materials considered list also lists articles by Melissa Hunt, Eva Telzer, Mark Griffiths, and Mitch Prinstein; correct?

A. I believe that to be correct.

Q. Your materials considered list lists seven articles by those individuals, who are also all paid plaintiffs' experts; correct?

MS. O'NEILL: Objection. Foundation.

THE WITNESS: Again, I don't know all the details of everyone who has been retained in this case.

BY MS. BARNHART:

Q. So you did not -- well, let me just ask it this way:

Do you agree with me, Dr. Zicherman, that the scientific literature presented in your materials considered list and in your report is not an evenhanded and balanced representation of that broader universe of literature?

MS. O'NEILL: Objection. Form.

THE WITNESS: Yeah, I reached my conclusions primarily based off of my clinical work. And the references that I utilize are in support of what I see every day working with very sick children

and teenagers.

BY MS. BARNHART:

Q. And that's all I'm trying to understand is you didn't set out to do a separate and independent, evenhanded, balanced review of the literature; you simply sought to identify literature that supported your clinical experience. Correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: I stated before I did not do a meta-analysis or a complex statistical -- formal statistical study evaluating all of the information that is out there in regards to this. I found studies that support what I see every day in practice.

BY MS. BARNHART:

Q. Okay. And you did not look for studies that might be at odds with what you see every day in your clinical practice?

MS. O'NEILL: Objection. Form.

THE WITNESS: They would be at odds with what is actually happening in the real world.

BY MS. BARNHART:

Q. So can you answer my question?

You did not seek out studies that might be at odds with what you see every day in your clinical

practice?

MS. O'NEILL: Objection. Form.

THE WITNESS: Again, I reference studies that are relevant to supporting my opinion, which is primarily driven and developed based off of actually working with kids that I see with significant social media addictions.

BY MS. BARNHART:

Q. You did not consider any documents produced by any of the parties in this litigation in developing your opinions; correct?

A. Documents produced by parties in this litigation?

Q. Are you aware that Meta has produced millions of documents in this litigation?

A. I am not familiar with how many documents Meta has produced in this litigation.

Q. Are you aware that Meta has produced documents in this litigation?

A. I am aware that documents have been produced.

Q. And you did not consider those -- any of those documents in forming your opinions; correct?

A. I did not consider internal documents in my opinion.

Q. Because you didn't think that Meta's internal documents would be relevant to your opinions; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: Well, yeah, I'm here to primarily discuss -- well, I'm here to discuss my opinion, which is, again, primarily driven by working with patients every day who are very, very sick.

BY MS. BARNHART:

Q. I don't think I got an answer to my question.

You didn't believe that Meta's internal documents would be relevant to your opinions; correct?

A. You know, I'm not sure what internal documents you might be referencing, but what was relevant to my opinion was the research that I cited and primarily my clinic work.

Q. You also didn't consider any documents produced by any of the states that you represent; correct?

A. Documents produced by the states that are involved in this litigation?

Q. Correct.

A. I believe -- again, I relied upon the research that I referenced and my clinical work.
Q. You didn't consider any deposition transcripts in forming your opinions; correct?
A. Deposition transcripts are not important -- or, I believe, relevant to my report, which is, again, primarily driven by my work with patients.
Q. Do you understand that all of the states that you represent have public health agencies?
A. Sounds correct.
Q. And you understand that all of those state public health agencies are concerned with the mental health of adolescents who reside in that state?
MS. O'NEILL: Objection. Foundation.
THE WITNESS: I would hope that to be the case.
BY MS. BARNHART:
Q. Do you have any idea whether your expert opinions in this case are consistent with those of public health experts in each of the 29 states you represent?
MS. O'NEILL: Objection. Form.
THE WITNESS: I would have to see what is written and what has been provided in regards to these public health departments.

BY MS. BARNHART:
Q. And you have not done that. You did not consider any materials from those public health agencies in forming your opinions; correct?
A. Well, I considered, again, what I have referenced in support of what I see in my office.
Q. So I take that that's a "no."
You didn't consider any materials from any of the state public health agencies in this litigation when forming your opinions?
A. Again, I would have to jog my memory, you know, what is out there. And I'm happy to review public health records from various states, but that was not any substantial part of what led to my opinion and report.
Q. Dr. Zicherman, do you agree that preexisting psychiatric disorders can cause adolescents to use social media for longer periods of time?
MS. O'NEILL: Objection. Form.
THE WITNESS: Sure. I can't sit here and say social media is always the driver of depression.
It's like -- sorry. I can't say that someone with mental health concerns who had depression and that led to a cascade of use of an

app like Instagram. That can happen. That can certainly happen.
But what I am seeing is that kids are coming in who I believe would not have otherwise been depressed -- anxious, issues with insomnia, family, academics -- if their social media use was not the primary driver of what is happening.
BY MS. BARNHART:
Q. When your teen patients present to you, they present to you in a dual diagnosis clinic; correct?
A. Yeah. It's considered a dual diagnosis clinic.
Q. And that means that when these teen patients present to you, they already have both some form of addictive behavior as well as some other psychiatric disorder; correct?
A. That is often the case, but even though we call it a dual diagnosis clinic, potentially someone could come in just with an addiction concern.
Q. That's not what your report says, is it?
MS. O'NEILL: Objection. Form.
THE WITNESS: In theory, someone could potentially have just an addiction diagnosis; but, primarily, just about all of the patients I work

with do have a dual diagnosis.
BY MS. BARNHART:
Q. Okay. I'm not talking about theoretical; I'm talking about what you believe to be your clinical experience.
So you operate a dual diagnosis clinic where your patients have both addiction concerns and other mental health concerns; correct?
A. That is generally the case.
Q. Okay. In that case, there could be at least three possible explanations of the relationship between those two things; right?
MS. O'NEILL: Objection.
BY MS. BARNHART:
Q. Let me try three of them with you.
One possible explanation of someone presenting with both a mental health concern and an addiction concern is that the addiction caused the mental health concern; right?
A. Well, that is what I am seeing in regards to social media in my office.
Q. Yeah, we're going to go through three possible explanations.
A. Okay.
Q. So that's one; right? One explanation is

that the addiction causes the mental health concern.
A. And that's the most likely explanation and the most likely outcome of what I'm seeing in my office.
Q. Yeah, we're going to get to that, Dr. Zicherman. One thing at a time.
A. Okay.
Q. Another -- a second possible explanation is that the mental health concern causes the addictive behavior; correct?
A. Unlikely. It's possible but not probable with the patients that I'm working with.
Q. Do you recall appearing on a podcast called "Screen Stories"?
A. I believe I did appear on a podcast called "Screen Stories."
Q. What is that podcast?
A. I remember the name. I honestly would have to jog my memory to recall exactly the details of the podcast.
Q. I have that you appeared on September 28, 2022. Does that sound about right?
A. It sounds like -- reasonably accurate.
Q. And that was before you were a paid expert in this litigation; correct?

A. Correct.
Q. All right. We're going to play you a couple of excerpts from that podcast.
MS. BARNHART: We'll mark this as tab -- or excuse me -- we'll mark this as Exhibit 16.
(Exhibit 16 was marked for identification and is attached to the transcript.)
MS. O'NEILL: Counsel, do you have a transcript of those videos?
MS. BARNHART: We'll hand you the slipsheet.
MS. O'NEILL: I'm just going to object for the record that we're not getting a transcript, and I think we should.
MS. BARNHART: Well, I don't think you've been giving us transcripts as a matter of course across these depositions. You've got the link that we pulled this from. You can go play it to your witness if you'd like.
So we'll go ahead and play the first clip.
(Podcast playing.)
MS. O'NEILL: Can we see the video?
MS. BARNHART: Can we pause?
We'll start again. This is a podcast.

MS. O'NEILL: Oh, I'm sorry. No video.
MS. BARNHART: There's not a video.
MS. O'NEILL: I apologize.
MS. BARNHART: So let's start it over.
Yeah, can you turn it up just a little bit more.
(Podcast playing.)
BY MS. BARNHART:
Q. What you're saying there -- that was you; correct?
A. It sounds like me.
MS. BARNHART: Okay.
MS. O'NEILL: And I'm just going to object for the record for the use of a shortened clip instead of the entire recording.
BY MS. BARNHART:
Q. What you're saying there, Dr. Zicherman, is that suicidal ideation comes first and then the social media use comes second; correct?
MS. O'NEILL: Objection. Mischaracterization.
THE WITNESS: I believe this is likely taken out of context. And to most accurately answer your question, I would need to hear more of this podcast.

BY MS. BARNHART:
Q. All right. But you said those words that we just heard; correct?
A. It sounds like it's taken out of context. It's hard for me to answer your question without knowing what I said before or after.
Q. Well, do you stand by your statement that patients who might have frequent and chronic suicidal thinking could cope with that mental health concern by using social media; in other words, social media might alleviate their mental health concerns?
A. Well, again, to most accurately answer that question, I need to hear more of the podcast. This was several years ago. We'll say I'm entitled to have evolving thoughts and opinions on this.
And the idea I think you're saying is that kids with chronic suicidal ideation might resolve to their phone or their social media accounts? Is that -- is that what I said? I honestly would almost need this repeated.
Q. Do you remember my question, Dr. Zicherman?
A. You can repeat it.
Q. All right. Let's try to keep my questions in mind. I'm repeating a lot of questions, and

that's leading to an extended deposition. We're going to have to keep the deposition open if I have to keep repeating my questions.

So just focus on answering my questions.

My question was do you stand by your statement that patients who might have frequent and chronic suicidal thinking could cope with that mental health concern by using social media?

A. I believe -- this is the summer of 2025 now. I've worked with enough patients to say that I believe it is more likely that someone with suicidal ideation will look at social media, and that suicidal ideation is likely to only worsen.

Q. And the basis for your statement is simply your memory over the last three years?

A. Working --

MS. O'NEILL: Objection. Form.

THE WITNESS: Working with enough patients over the years, the problem has become more and more apparent and clear to me.

BY MS. BARNHART:

Q. So you are -- you no longer stand by your statement in September of 2022 on this podcast?

A. Well, I think there can be situations where maybe there's an outlier and a patient finds some

sort of salvation in social media.

This is a spectrum. But the majority of patients that I'm working with, the case will be that they will use social media, and the mental health component will only worsen, and often significantly worsen, whether it's the development and severity of suicidal ideation, depression, anxiety, insomnia, so on and so forth.

Q. Did you believe this statement to be true when you made it in September 2022?

A. I really would need to accurately answer that question by listening to the entire podcast segment. So this is handicapping me in answering the question, but maybe there's a scenario where that can be possible.

Q. You're welcome to listen to it on your own free time, but I have very limited time today, which is why I'm trying to speed this along.

You don't have a habit of saying untrue statements on podcasts, do you?

MS. O'NEILL: Objection. Form.

THE WITNESS: I go on podcasts and state what I believe to be the truth of what I am seeing and what I'm working with.

MS. BARNHART: Okay. Then let's play

another statement that you said on that same podcast.

(Podcast playing.)

BY MS. BARNHART:

Q. So there you're saying that the causal link in your view between mental health disorders and excessive use of technology could just as easily go in the direction of mental health disorder causing excessive use of technology; correct?

MS. O'NEILL: Objection. Characterization.

THE WITNESS: I don't believe I can accurately answer your question listening to a very, very brief snippet of the podcast. I'm happy to listen to the entire podcast while we're here, comment more on it. This was in 2022.

And also, honestly, I would need that replayed to fully and accurately comment on it again. I didn't quite hear --

MS. BARNHART: All right. We can replay it. Listen carefully, please.

(Podcast playing.)

THE WITNESS: Yeah, I feel like I can't really fully accurately answer that question without hearing the rest of the -- the podcast.

///

BY MS. BARNHART:

Q. So do you or do you not -- it's a yes-or-no question.

Do you agree today with the statement that:

"It is just as likely that excessive use of technology causes mental health disorders as mental health disorders cause excessive use of technology"?

MS. O'NEILL: Objection. Mischaracterization.

THE WITNESS: Yeah, I believe all I said was "It does."

BY MS. BARNHART:

Q. Just as easily go in the other direction?

MS. O'NEILL: Same objection.

THE WITNESS: Play it again. I believe all I said at the end was "It does."

BY MS. BARNHART:

Q. In response to the questioner's question?

A. You can play it again. I mean, I want to provide an accurate answer.

Q. I'm concerned about your faculty and memory, sir, because I'm having to repeat things over and over and over again, which doesn't reflect

well on your personal memory abilities.

If you would like to play it again, you can listen to it on the next break. I'm not going to waste my time on the record.

A. Okay.

Q. But I want to know do you or do you not agree, sitting here today, with the statement that it is just as likely that mental health disorders can cause excessive use of technology?

A. I mean, I believe that that is pulling a statement out of context.

I will -- and I did say this earlier.

There's a chance that someone's mental health can trigger use of -- or maybe excessive use of a platform. But what I'm seeing in 2025, the summer of 2025 leading up to this day, is that it is a situation where use of the app -- of the Instagram platform is what I see driving primarily mental health concerns in the patients that come to my clinic.

Q. Do you make any effort -- when a patient presents with both mental health concerns and purported Instagram addiction, do you make any effort to determine whether the mental health concern is driving the Instagram use?

MS. O'NEILL: Objection. Form.

THE WITNESS: I do a comprehensive evaluation of every patient that comes through the door, including an extensive mental health history and a history of using social media platforms or other technology, whatever it might be. I want as much information as I can have to make an accurate assessment and diagnosis and plan.

BY MS. BARNHART:

Q. And by "comprehensive evaluation," you mean you're just asking these patients questions; correct?

MS. O'NEILL: Objection. Mischaracterization.

THE WITNESS: That's what seeing a patient is. It's asking questions.

BY MS. BARNHART:

Q. You're relying on the patient's recall and the parents of the patient's recall; correct?

A. Well, that's what we do in medicine. We talk to patients. And when we work with children, adolescents, teenagers, we rely on parents. So we get two different accounts.

Q. So your opinions in this case not only rely on your own memory faculties but also the memories

of your patients and the parents of the patients; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: Well, seeing a patient in a doctor's office is a product of conversation and interview that -- you know, for me, I believe is quite thorough and takes quite a significant amount of time.

BY MS. BARNHART:

Q. You didn't answer my question, Dr. Zicherman.

Do you remember it?

A. Well, you can rephrase that. I want to answer your question as accurately as I can.

Q. Do you remember it?

A. Can you restate it, please.

Q. Did you forget it?

A. Well, restate it.

MS. O'NEILL: Objection. Argumentative.

BY MS. BARNHART:

Q. All right. This is probably the 20th question you forgot today, just for the record. We can do a count at the end.

MS. O'NEILL: Objection to that preamble.

///

BY MS. BARNHART:

Q. My question was your opinions in this case not only rely on your own memory abilities, which have been called into question today, but also the memories of your patients and the parents of those patients; correct?

MS. O'NEILL: Objection. Form. Argumentative.

THE WITNESS: Well, yeah. A significant part of a clinical assessment is a patient and parent recollection, which involves memory.

MS. BARNHART: Why don't we go off the record.

THE VIDEOGRAPHER: Stand by. The time is 2:53 p.m. We're going off the record.

(Recess taken.)

THE VIDEOGRAPHER: The time is 3:15 p.m., and we are back on the record.

BY MS. BARNHART:

Q. Dr. Zicherman, if you can look at your report, which is Exhibit 1. And I'm on page 8.

I'm sorry. I'm not on page 8. Hold on one second. I am at paragraph 1 at the introduction under your summary of opinions.

Let me know when you're there.

A. So page 2?
Q. Correct.
Your first opinion under your summary of opinions starts:
"Social media addiction is a serious concern acknowledged by mental health professionals."
Do you see that?
A. I do see that.
Q. When you say "acknowledged by mental health professionals," you do not mean that all mental health professionals accept the view that social media addiction is a serious concern; correct?
A. I believe that many do accept this, but there might be some mental health professionals out there that are not aware of this problem or in agreement yet.
But I'd say those that are working in this space are in agreement that this is a significant concern.
Q. In fact, you know that a significant number of psychiatrists working in this space do not believe that social media addiction is a serious concern; correct?
MS. O'NEILL: Objection. Form.

THE WITNESS: There might be psychiatrists that don't agree, but I believe that most do agree. And most psychiatrists with a subspecialty in child and adolescent psychiatry and addiction psychiatry would agree with this.
BY MS. BARNHART:
Q. Are you familiar with the Diagnostic and Statistical Manual of Mental Disorders?
A. I am.
Q. That's often referred to as the DSM?
A. I am familiar.
Q. And do you understand that the DSM provides a standardized means of classifying and diagnosing psychiatric disorders?
A. That's intended to be a purpose of it.
Q. Okay. If you look at paragraph 25 of your report -- we'll use your own words.
"The DSM is a standardized classification of mental disorders used by mental health professionals in the United States."
Do you see that?
A. Sorry. You said paragraph 25?
Q. Correct.
A. Okay.

Q. Starting at the end of page 9, it starts "The DSM."
Do you see that?
A. Okay. I see it.
Q. And it goes on to the next page. I'll read it again.
"The DSM is a standardized classification of mental disorders used by mental health professionals in the United States."
Do you see that?
A. Yes.
Q. And you stand by that statement in your report?
A. Yes.
Q. Okay. Are you aware of any means of classifying and diagnosing psychiatric disorders that's more authoritative than the DSM in the United States?
MS. O'NEILL: Objection. Form.
THE WITNESS: More authoritative as far as diagnosing? Oh, there are, you know, ways that you can diagnose an individual beyond just the DSM, which I would say is a pretty flawed entity in many ways and often has significant lag time when it

comes to the actual development and publication of particular ailments from the time that we actually recognize a problem.
BY MS. BARNHART:
Q. You don't say anything about there being flaws in the DSM in your report, do you?
A. Well, I believe that a concern about the DSM is that it has a -- often, I would say, problematic lag time from the time of, you know, clinicians recognizing a condition that they are seeing and treating to the time that a condition arrives in the DSM.
Q. Do you remember my question, Dr. Zicherman?
A. Can you please repeat it.
Q. Did you forget it?
A. Well, I'd like to answer your questions accurately; so I would love to hear you repeat the question.
Q. Okay. That's because you've forgotten it in the 10 seconds since I asked it; correct?
MS. O'NEILL: Objection. Argumentative.
BY MS. BARNHART:
Q. You've forgotten it?
A. If you have the question, I'm happy to answer it.

Q. Okay. Please pay attention to my questions.

You don't say anything about there being flaws in the DSM in your report, do you?

A. Okay. I don't know if I necessarily say "flaws," but there are certainly issues with the DSM, like I mentioned, including lag time and the fact that this is primarily a tool that helps actuaries and researchers.

And there are plenty of conditions acknowledged within mental health that we know exist, we treat, that are not actually in the DSM at this point.

Q. You can't, sitting here right now, point me to anything in your report that describes purported flaws in the DSM; correct?

A. Well, in the report, I reference that -- excuse me -- that it has not yet recognized specifically social media addiction. And I believe that is due to the lengthy lag time that they've demonstrated historically.

Q. Do you remember my question, Dr. Zicherman?

A. About flaws.

Q. Yeah. What did I ask you?

A. Again, if you want to repeat the actual

question, I'm happy to hear you repeat it.

Q. I said you can't, sitting here right now, point me to anything in your report -- and I'm talking specific paragraph number -- that describes purported flaws in the DSM.

A. Well, again, if you want to call it a flaw, if that's the language you want to use, I would say that lag time is a concern which I have referenced in my report.

Q. "Flaw" was your word, Dr. Zicherman. So where in your report do you reference lag time?

A. Well, for instance, I do reference that the DSM-5 was last published in 2013.

Q. Okay. Let's talk about that.

You're talking about paragraph 25, top of page 10; right?

A. Correct.

Q. And as you noted, you say the current edition is the DSM-5, published in 2013.

A. Correct.

Q. You repeat that same statement in your rebuttal report; correct?

A. I believe I did.

Q. Do you believe that the statement is a true and accurate statement?

A. That the current edition was published in 2013?

Q. Correct.

A. Yes. That's accurate.

Q. Okay. In the sentence, the way you wrote this, you said DSM-5, but you used a Roman numeral V.

Do you see that?

A. I do see that.

Q. Do you agree with me that any serious psychiatrist knows that the DSM-5 was the first edition of the DSM to use Arabic as opposed to Roman numerals?

MS. O'NEILL: Objection. Form.

THE WITNESS: Okay. That's interesting to note.

BY MS. BARNHART:

Q. You didn't know that?

A. Sorry. I have, you know, very important things to pay attention to in clinic and working with patients that the nomenclature for 5 -- sorry. I don't find that all that important to my work.

Q. Have you actually opened the DSM-5 ever in your career?

A. I have.

MS. O'NEILL: Objection to form.

BY MS. BARNHART:

Q. Okay. So you use the DSM-5 in your work; right?

A. The DSM-5 is a part of my work.

Q. Do you have a hard copy of the DSM-5 in your office?

A. It depends on which office I'm in on which day.

Q. Do you have a hard copy anywhere? Do you possess a hard copy of the DSM 5?

A. Yes.

Q. You have seen the cover of the DSM-5 many times?

A. I've seen the cover.

Q. Probably every day; right?

A. Well, maybe not every day.

Q. How often do you look at the cover of the DSM 5?

A. Hard to answer -- to estimate that. Again, it depends on which office I'm in, which day, and if it has a copy of the DSM in it.

Q. Are you aware of any credentialed psychiatrist who uses Roman numerals to refer to the DSM-5?

MS. O'NEILL: Objection. Foundation.
THE WITNESS: There probably are professionals out there that use -- reference it with Roman numerals or not.
BY MS. BARNHART:
Q. Can you name any other professional that uses a Roman numeral to reference DSM-5?
A. Not offhand. I would have to think about it.
Q. All right. Let me know if it comes to you at any point today.
A. Okay.
Q. It's also true that the DSM-5 is not the current edition of the DSM; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, it's technically the most recent form.
BY MS. BARNHART:
Q. What do you mean by "technically"?
A. Well, I believe they did come out with an update a few years later, but it's not considered DSM-6.
Q. That's correct. What was the update?
A. I -- without looking at it, I'd want to refresh my memory on the exact title of it.

Q. You understand there was an update called the DSM-5 Text Revision in 2022?
A. That sounds like the correct name of it.
Q. And that's the current version of the DSM; right?
A. That is the most recent update that they have published.
Q. And why didn't you mention that update in your report?
MS. O'NEILL: Objection. Form. Mischaracterizes the report.
THE WITNESS: I reference criteria for substance use disorders in particular, which is in DSM-5.
BY MS. BARNHART:
Q. Well, you go out of your way in your report to say that the current edition of the DSM-5 was published when social media was only in its infancy; right?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, DSM-5 was published in 2013, which is certainly the very early stages of the Instagram platform.
BY MS. BARNHART:
Q. You don't mention that the DSM-5-TR was

just published three years ago; right?
MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: I do not believe I reference that in the report.
BY MS. BARNHART:
Q. Social media was not in its infancy in 2022; correct?
A. I would say that social media has evolved, and there certainly are more users over time, I'm sure. And, you know, there can be significant lag time between seeing a condition in a doctor's office and seeing that condition actually listed in the DSM.
Q. All right. Do you remember my question, Dr. Zicherman?
A. I'm happy to hear you repeat it.
Q. Did you forget it again?
A. Well, I'd like to answer your questions accurately.
Q. Okay. I really would like you to pay attention.
A. I'm trying my best.
Q. Do you agree with me that social media was not in its infancy in 2022?

A. I think the word "infancy" is relative. You know, even if you say it's been around for 10 or so years now, I think you can still say that that's infancy.
Q. A 10-year-old is an infant in your view?
A. So I would not equate the development of an app with the development of a child.
MS. BARNHART: All right. I'm going to show you what's been marked as Exhibit 17.
(Exhibit 17 was marked for identification and is attached to the transcript.)
BY MS. BARNHART:
Q. So Exhibit 17 is a press release from the American Psychiatric Association dated March 18th, 2022.
Do you see that?
A. I do.
Q. Have you seen this document before?
A. It appears familiar.
Q. This is a press release discussing the release of the DSM-5-TR in 2022; correct?
A. That appears correct.
Q. And do you see the second paragraph -- well, let me start with the first paragraph. The

second sentence of the first paragraph says:

"The DSM, which the American Psychiatric Association has published and updated since 1952" --

A. Second sentence, first paragraph?

Q. Correct.

A. Okay.

Q. (Reading):

"The DSM, which the American Psychiatric Association has published and updated since 1952, defines and classifies mental disorders in order to improve diagnosis, treatment, and research."

Do you see that?

A. I do see that.

Q. You don't have any reason to dispute that description, do you?

A. I don't have any reason to dispute that description.

Q. If you look at the next paragraph, it says that the DSM-5-TR was developed with the help of more than 200 subject matter experts.

Do you see that?

A. I do see that.

Q. Do you have any reason to dispute that?

A. I do not.

Q. In the third paragraph, this press release says that:

"The DSM-5-TR incorporated feedback from 29 global experts in cultural psychiatry, psychology, and anthropology."

Any reason to dispute that?

A. I have no reason to dispute that.

Q. The paragraph goes on to say that the DSM-5-TR incorporated feedback from an additional 14 mental health practitioners from diverse backgrounds with expertise in disparity-reduction practices.

Any reason to dispute that?

A. I do not have reason to dispute that.

Q. Do you understand that since the DSM-5-TR was released in March of 2022, the DSM has also been updated through an online process on an annual basis?

A. I am aware that there can be some update processes involved with the DSM.

Q. Are you aware that researchers who wish to propose updates to the DSM can submit proposals through the online portal?

A. I was not aware of the exact mechanism that changes can be proposed.

Q. Have you ever submitted a proposal to add social media addiction to the DSM-5?

A. I have not; but now that you've made me aware, maybe I should be involved with that.

Q. You should. You weren't aware before?

A. I was not aware that was the mechanism to submit potential changes.

Q. Are you aware that online proposals undergo an extensive multistage review process by panels of experts before final approval and inclusion if appropriate?

MS. O'NEILL: Objection. Foundation.

THE WITNESS: That sounds like it could be accurate.

BY MS. BARNHART:

Q. Dr. Zicherman, if you do submit an online proposal to add social media addiction to the DSM-5, will you give us a copy of that proposal?

A. I don't see why I would not be able to.

Q. Okay. Thank you.

Am I correct, Dr. Zicherman, that the DSM-5 does not recognize a condition called social media addiction?

A. It is not currently listed in the DSM; but I would, of course, add, to fully answer that question, whether it's in the DSM or not, it's not really relevant to what I see and what I do.

I see kids who are very sick with, often, severe social media use concerns. And whether that is listed as a condition or not, I'd have to -- I have to evaluate and treat those individuals.

Q. Do you remember what my question was?

A. If the DSM-5 currently lists social media use disorder, I believe.

Q. That was a pretty good recollection. One for a hundred.

Let's just keep to my questions. Your counsel can ask you whatever questions she wants at the end of this if she wants to talk more about your clinical experience. Okay?

A. Okay.

MS. BARNHART: Okay. So let's take a look at what the DSM-5-TR does say about behavioral disorders.

I'm going to mark as Exhibit 18 some excerpts from the DSM-5-TR.

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(Exhibit 18 was marked for identification and is attached to the transcript.)

BY MS. BARNHART:

Q. So as I'm sure you understand, the DSM-5-TR is an extremely long book. So we've just given you excerpts. If you need to reference the full book, you're welcome to. We have a copy. Just let me know.

A. Okay.

Q. So the first page -- the second page in this document that you have in front of you is page 543 of the DSM-5-TR.

And this is a section titled "Substance-Related and Addictive Disorders."

Do you see that?

A. I see that.

Q. I assume you've read this section before?

A. I have seen this section before.

Q. Okay. And is it your understanding that this section of the DSM-5-TR recognizes only gambling disorder as a behavioral addiction?

MS. O'NEILL: Objection. Form.

THE WITNESS: Can you rephrase the question.

BY MS. BARNHART:

Q. Sure.

Am I correct that gambling disorder is the only behavioral addiction recognized by the American Psychiatric Association in the DSM-5-TR?

A. I believe it is considered also an impulse control disorder with significant overlap with addiction disorders.

Q. Are there any other impulse -- well, I'm not really following your answer, but I'll ask it a different way.

If you look four pages into this document, which is page 661 of the DSM-5-TR, there's a section called "Non-Substance-Related Disorders."

A. Yes.

Q. And gambling disorder is listed here?

A. Yes.

Q. Are you aware of any other non-substance-related disorders that are listed in the substance-related and addictive disorders section of the DSM-5-TR?

A. I'm familiar with substance disorders and gambling disorders. I'd have to refresh my recollection of the rest of the DSM to fully accurately answer that question; but, sure, I'm

familiar with substance disorders and gambling disorders.

Q. And, sitting here today, you can't identify any other non-substance-related disorder that is listed in the substance-related and addictive disorders section?

A. It might be accurate that gambling disorders is the one non-substance disorder that is listed in the section.

Q. Okay. If you'd turn to page 903 of the DSM-5-TR, which is a few pages in.

Do you see that?

A. I see that.

Q. This is a section of the DSM-5-TR called "Conditions for Further Study"; correct?

A. Correct.

Q. And as described here, these are conditions "on which future research is encouraged to allow the field to better understand these conditions and inform future decisions about possible placement in forthcoming editions of DSM."

Do you see that?

A. Correct.

Q. And for those conditions that are listed for further study, this section says that:

"The research criteria sets were set by expert consensus informed by literature review, data reanalysis, and field trial results."

Do you see that?

A. Where was that specific reference?

Q. The first sentence of the second paragraph.

A. Okay. I see that.

Q. And you don't have any reason to dispute that statement; right?

A. I have no reason to dispute that statement.

Q. Do you have any reason to dispute that "The DSM-5 task force and work groups subjected each of these proposed criteria sets to a careful empirical review and invited wide commentary from the field as well as from the general public"?

MS. O'NEILL: Objection. Foundation.

THE WITNESS: I have no reason to dispute how the DSM arrives at their updates.

BY MS. BARNHART:

Q. Okay. And the DSM-5 task force "ultimately determined that there was insufficient evidence to warrant inclusion of these conditions for further study as official mental disorder diagnoses."

Correct?

A. I believe that is correct.
Q. One of the conditions for further study identified in the DSM-5-TR is internet gaming disorder; correct?
A. Correct.
Q. If you look at page 914, this is the section describing internet gaming disorder. And if you look at the second -- the last full paragraph on page 914, it says:

"Internet gaming disorder has achieved significant public health importance, and additional research may eventually lead to evidence that internet gaming disorder (also commonly referred to as internet use disorder, internet addiction, or gaming addiction) has merit as an independent disorder."

Do you see that?
A. I see that.
Q. And social media addiction is not identified anywhere in the DSM-5-TR as a condition for further study; correct?
A. Those words do not appear, to my knowledge.
Q. And, in fact, the DSM-5-TR expressly says

that social media addiction should not be analogized to internet addiction; correct?
A. Where is this reference?
Q. You don't know that offhand?
A. Well, I would need to refresh myself of the specific reference.
Q. Sure.

If you look at page 916, under "Differential Diagnosis," it says:

"Excessive use of the internet not involving playing of online games (e.g., excessive use of social media such as Facebook or viewing pornography online) is not considered analogous to internet gaming disorder, and future research on other excessive uses of the internet would need to follow similar guidelines as suggested herein."

Do you see that?
A. I do see that.
Q. So the DSM is expressly saying that excessive use of social media is not considered analogous to internet gaming disorder; correct?
A. Well, I believe there is a common shared mechanism of how addictions work. And there are

certainly similarities between a social media addiction and a gaming addiction and a substance use addiction.

But the exact words that you were referencing, as far as similarities, I see this here.
Q. All right. My question was not about what you believe; my question was about what the 200 subject matter experts who arrived at the DSM-5-TR consensus wrote.

And they wrote:

"Excessive use of the internet not involving playing of online games, such as excessive use of social media, is not considered analogous to internet gaming disorder."

Correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: I believe this is a rapidly evolving field. But, sure, I see the statement that is listed here.

BY MS. BARNHART:
Q. So do you agree with me that at least 200 subject matter experts have rejected your opinion that social media addiction is a valid and reliable

diagnosis?

MS. O'NEILL: Objection. Form.

THE WITNESS: Well, I would agree that the DSM appears to believe they need more time to potentially reach a diagnosis of social media addiction.

And, again, this is -- as I stated earlier, this is an evolving field. And I do believe it is my opinion that eventually the DSM will acknowledge social media use addiction.

BY MS. BARNHART:
Q. Are you aware that another paid plaintiffs' expert in this litigation is on a committee relating to social media addiction and the DSM-5?
A. I'm not aware.
Q. Do you know Dr. Dimitri Christakis?
A. The name sounds familiar.
Q. You said you agree that the DSM appears to believe they need more time to potentially reach a diagnosis of social media addictions; but, in fact, the DSM hasn't even listed it as a condition for further study. Correct?
A. It took 40 years from the genesis and idea of autism spectrum disorder to the point it was recognized in the DSM. DSM has a history of

demonstrating that they take a long line -- a long time to recognize a condition.

Q. Do you remember my question, Dr. Zicherman?

A. Please repeat it.

Q. You forgot again?

A. Well, again --

MS. O'NEILL: Objection. Argumentative.

THE WITNESS: -- I would like to answer your questions accurately.

BY MS. BARNHART:

Q. Well, one way to do that is to listen to my questions and remember them and answer them.

So my question was social media addiction is not even listed by the DSM as a condition for further study; correct?

A. That does not appear listed, to my knowledge, as a condition for further study at the time of this DSM.

Q. Nor has it been added as a condition for further study in any of the annual updates since 2022; correct?

A. Well, I again believe it will be added to the DSM. And it's also my understanding that there will be potentially a DSM-6 in the next four to five years.

Q. So you say a similar thing in your report at paragraph 25, Exhibit 1. You state:

"In my professional opinion, although the DSM-6 has an unknown release date, it is likely that the DSM-6 will have new official diagnoses for various technology addictions."

Do you see that?

A. I do see that.

Q. My first question is do you think that DSM-6 will revert to Roman numerals?

A. I don't know.

MS. O'NEILL: Objection. Form.

BY MS. BARNHART:

Q. You don't have any view on that, do you?

A. Maybe they will; maybe they don't.

Q. Okay. You don't have any reason to think they will, do you?

MS. O'NEILL: Objection. Form. Argumentative.

THE WITNESS: I am not on the DSM formation committee.

BY MS. BARNHART:

Q. What's the basis for your professional opinion -- well, first of all, let me just -- let me

backtrack.

You just testified that -- here today that you think the DSM-6 is going to come out in the next four to five years; right?

A. There was a recent update I became aware of, a press release, that indicated it might come out in the next -- I believe it was referenced four or five years.

Q. Who issued that press release?

A. I believe it was the APA.

Q. And that press release came out after your report was submitted?

A. I don't remember exactly when it came out, but I came across that after my reports were submitted.

Q. What is the basis for your professional opinion stated here?

A. My opinion that the DSM-6 is likely to have official diagnoses for various technology addictions?

Q. Correct.

A. Based on the fact that not just myself but clinicians who work in this space, in this area, are seeing significant concerns in relation to technology use, specifically, social media, and the

effects that it is causing on the mental health and lives of children, teenagers, and adolescents that we work with.

It feels like an epidemic when you're in the office and actually seeing and evaluating and treating these kids.

Q. And by epidemic you mean the one patient per month that presents with social media addiction concerns?

MS. O'NEILL: Objection. Form.

THE WITNESS: It adds up over the years. I have a very full patient panel.

BY MS. BARNHART:

Q. But you can't tell me how many, though, right, sitting here today?

MS. O'NEILL: Objection. Form. Mischaracterization.

THE WITNESS: I believe we discussed that earlier about estimates of patients.

BY MS. BARNHART:

Q. Sure. Okay. I'll refer to your earlier testimony, then.

Are you aware -- I know you testified earlier that you yourself have not submitted an online proposal relating to social media addiction

to the DSM; correct?
A. Correct.
Q. Are you aware of anybody who has submitted such an online proposal relating to social media addiction to the DSM?
A. I am not aware of anyone.
Q. You also said -- you referred to other clinicians who work in this space who share your views. Can you name any of those clinicians?
A. When the idea of harms of social media use comes up clinically or in didactics, I don't believe I've had pushback from anyone that I work with as a colleague or trainee.
Q. Okay. That didn't answer my question.
Do you remember it?
MS. O'NEILL: Counsel, I'm just going to object to the constant references to memory.
MS. BARNHART: Well, I'm going to object to the constant nonresponses.
MS. O'NEILL: Well --
MS. BARNHART: It's getting ridiculous, Counsel. I mean, he's not answering my questions; so I worry about his ability to remember them.
MS. O'NEILL: Well, to be fair, when you're reading back the questions, you were actually

reading them back. He doesn't have the realtime in front of him. It's not a memory test.
MS. BARNHART: It is -- it is a little bit of a memory test. That's what his whole opinion is based on. It shouldn't be this difficult to remember a question I asked five seconds ago.
BY MS. BARNHART:
Q. But since you forgot it --
MS. O'NEILL: Okay. Well, my objection is there for the record.
BY MS. BARNHART:
Q. Since you forgot it, Dr. Zicherman, I'll ask it again.
You said -- earlier you referred to other clinicians who work in this space who share your views. Can you name any of those clinicians?
A. I'm not here to name other colleagues that I am -- discuss social media use disorder with.
Q. So no, you are unwilling to name any other clinicians who work in this space who share your views?
A. I would say that all colleagues that I discuss this with -- clinic -- in my clinical practice at Stanford agree with me.
I cannot recall any pushback from my

colleagues or even John Ellis in psychiatry or addiction psychiatry trainees that I work with.
Q. I'll try one more time.
Are you willing to name any other clinicians who work in this space who share your views on social media addiction?
A. You know, you're welcome to go through the roster of child and adolescent psychiatrists at Stanford and ask them that question. I would not want to speak or share the opinion of other individuals specifically without asking them.
Q. Well, you just did that, Dr. Zicherman; so you've dug -- backed yourself into a bit of a corner.
If you're not willing to share the names, that's fine. Just say that we'll move on. Is that --
A. Okay. Well, then I would say I'm not willing to share the names of individuals.
Q. Okay. Have you developed any opinions on the prevalence of purported social media addiction among US teenagers?
A. Have I developed opinions on the prevalence of social media use disorders?
Q. Well, hold on. Let me just stop you, then.

You -- I said "social media addiction," which is the phrase that appears throughout your report.
A. Okay.
Q. Do you prefer the term "social media use disorder"?
A. No, we can use "addictions."
Q. Well, I'm just using it because you use it. So I'm -- do you use "social media addiction" in your clinical practice?
A. I use that term in practice.
Q. So if you do eventually produce your clinical notes in this litigation, you would expect for me to see "social media addiction" written all over your clinical notes; is that right?
MS. O'NEILL: Objection. Form.
THE WITNESS: I don't believe it's appropriate for me to answer questions about my notes.
BY MS. BARNHART:
Q. On what basis, Dr. Zicherman?
A. Well, I believe I say that that was not what I relied on to form my opinion earlier.
Q. That's news to me.
So you did not -- let me ask that question

again because I don't think we got a clear answer.

You did not consider or rely on any of your clinical notes or clinical templates in forming your opinions in this case; is that accurate?

A. I have to review notes every day that I'm in the office. That's what it is to work with patients. Specific notes and encounters were not used to develop my opinion in the matter.

Q. And when you review those notes every day that you're in the office, do you see the phrase "social media addiction" in those notes, or do you see another phrase like "social media use disorder" or "problematic social media use"?

A. Well, I think that terms can be interchangeable, and I've seen it stated different ways across records.

Q. So you use different terms across your different records?

A. Sometimes I use different terms.

Q. Do you sometimes use "social media addiction"?

A. I have referenced that term.

Q. How many times have you specifically diagnosed someone with social media addiction specifically, that disorder?

A. Again, I think that goes into privileged patient information. Again, I can estimate that -- you know, we've gone through this -- the percentage of patients that I believe have concerning social media use -- social media use concerns and the percentage of patients presenting for those evaluations that I end up utilizing a diagnosis for.

Q. So you're unwilling to answer my question of how many times you have specifically diagnosed someone with social media addiction?

MS. O'NEILL: Objection. Form.

THE WITNESS: Well, I'm mean, I'm happy to provide estimates again which coincide with our discussions earlier about percentage of patients that present with concerning social media use for that reason and percentage of patients that end up with a potential diagnosis within my estimation in the clinic.

BY MS. BARNHART:

Q. I'm just trying to understand why you're resisting my question. Is it that you do not know the number of times that you have specifically diagnosed someone with social media addiction, or are you just not willing to answer it for privacy reasons?

A. Well, I believe I have answered the question to the best of my abilities based on working with patients in this clinic for many, many years.

Q. Well, then I need you to answer it again because I didn't get an answer to my question.

What is the number of times that you have diagnosed someone specifically with social media addiction?

A. For patients presenting to the clinic with social media use concern -- disorder concerns or addiction concerns, the preponderance of those patients end up with a diagnosis.

Q. So how many patients have you diagnosed specifically with social media addiction?

A. So if we reference again the number of patients presenting to the clinic for concerns for technology use, which I reference 25 to 35 percent, the majority of those will end up meeting what I would state is criteria for a social media use addiction or disorder.

Q. Can you or can you not give me a number in response to my question how many patients have you diagnosed specifically with social media addiction?

MS. O'NEILL: Objection. Asked and

answered.

THE WITNESS: I believe I've answered that question --

BY MS. BARNHART:

Q. Tell me again.

A. -- several times.

Q. I'm looking for a number. Okay? I'm not looking for a speech; I'm looking for a number.

How many patients have you diagnosed specifically with social media addiction?

MS. O'NEILL: Same objection.

THE WITNESS: We've discussed that there are hundreds of patients that have come in over the course of years. Roughly somewhere in that range would be the number that I would say meet criteria for a social media use addiction disorder.

BY MS. BARNHART:

Q. Nowhere in that answer did you give me a number of patients that you have actually diagnosed specifically with social media addiction.

A. I'm sorry. I believe I've answered the question.

Q. What's the number, Dr. Zicherman?

MS. O'NEILL: Objection. Asked and answered.

THE WITNESS: Again, I believe it's in the hundreds, going back to, you know, the genesis of the clinic.
BY MS. BARNHART:
Q. That you've actually diagnosed with social media addiction?
A. I think that's -- you know, if we do the math, I think that's probably a fair estimate.
Q. I did the math, and I came up with 60. We talked about this earlier.
A. 60 over the course of one year.
Q. No, over the course of five years, Dr. Zicherman. That's what we talked about earlier.
A. Well --
Q. Let's do it this way.
A. Sure.
Q. You have not actually gone back through -- I just want to confirm.
You have not gone back through all of your clinical notes in a systematic way to determine the number of people that you've actually diagnosed with social media addiction; correct?
A. I have not done that as far as report process.
Q. Okay. So we got a little off topic. I'll

circle back to where I think we were.
Have you developed any opinion on the prevalence of purported social media addiction among US teenagers?
MS. O'NEILL: Objection. Form.
THE WITNESS: I've developed opinions on prevalence.
BY MS. BARNHART:
Q. What is your opinion -- in your opinion, what is the prevalence of purported social media addiction among US teenagers?
A. It's absolutely increasing across our population; but to answer that question, you're getting into population epidemiologic considerations. And I'm not here to provide a specific answer on the specific number, but I can tell you it's absolutely increasing. And I'm seeing that within the clinic as well.
Q. So you have no opinion on what is the prevalence of purported social media addiction among US teenagers?
MS. O'NEILL: Objection. Form.
THE WITNESS: I believe it's fair to say that the prevalence is significant and concerning, but ask a epidemiologist or someone who is an expert

in population-level studies to answer that question.
BY MS. BARNHART:
Q. So you cannot answer that question? That's what I need to be made clear. I need to know the scope of your opinions, Dr. Zicherman.
So you cannot answer that question; correct?
A. I can answer questions in relation to my clinical work.
Q. Okay. You cannot answer questions about prevalence across the United States; correct?
A. I think you would be better served asking an expert who has a background in epidemiologic studies and statistical measures to answer that question.
Q. You can only answer this question in relation to your clinical work in Stanford, California, in the Bay Area; correct?
A. This is what I see.
MS. O'NEILL: Objection. Form.
BY MS. BARNHART:
Q. Okay. And, again, I just want to clarify. This is what you see in the Bay Area in Stanford, California; correct?
A. Correct.

Q. Okay. You do not know the prevalence across the entire state of California, do you?
A. I can't answer that question. Again, I made reference to I think you would be better served asking an expert with a background in epidemiologic studies.
Q. You don't think your clinical population in Stanford, California, is representative of the entire state of California, do you?
MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: I'm certainly seeing the most severe presentations in clinic.
BY MS. BARNHART:
Q. You also don't think that your clinical population in Stanford, California, is representative of the teen population across the state of Kentucky, do you?
MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: I don't know much about the population of the state of Kentucky. And I think if you're asking a question like that, you can ask someone else who has that information on epidemiologic studies.

BY MS. BARNHART:

Q. You don't know much about the population of any of the 27 other states that you represent in this case, do you?

MS. O'NEILL: Objection. Form.

THE WITNESS: I can comment on my clinic population. I also understand that it is going to be a population with a more severe presentation than likely what we're seeing in the community. Not everyone in the community needs to come in and see me for treatment.

BY MS. BARNHART:

Q. So you don't have a view on what the prevalence is -- even in the community of the Bay Area, you don't have a view on what the prevalence of social media addiction among teens is; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: I'm not aware of the exact data and statistics in relation to prevalence of social media use disorder in the Bay Area.

BY MS. BARNHART:

Q. Okay. You also have no opinions on the exact data and statistics in relation to the prevalence of social media use disorder of any population aside from the clinical population that

you treat in your clinic?

A. Can you repeat or rephrase that.

Q. I was just trying to use your words.

A. Okay. So please --

Q. I'm just making clear the only population about which you have any views on prevalence of social media addiction is your clinical population that you treat in Stanford, California?

A. Well, it is the population that I used to primarily base my opinion on.

Q. Right. And so any other population, including the broader population of the Bay Area, you don't have any views on the prevalence of social media addiction among teens in the Bay Area?

MS. O'NEILL: Objection. Form.

THE WITNESS: I believe it's likely to also be a significant problem. Again, I am relying on my clinical work with patients I see every day in my practice primarily.

BY MS. BARNHART:

Q. Do you know how many teens live in the Bay Area?

A. I am not familiar with the exact number of teens in the Bay Area.

Q. Have you performed any investigation or

other work to determine if the people that present at your clinic are representative of the teen population in the broader Bay Area?

A. I have not done any formal statistical surveys into that question.

Q. So you have no basis to believe that social media addiction is a significant problem among the teen population in the Bay Area?

MS. O'NEILL: Objection. Form. Mischaracterization.

THE WITNESS: I believe it's absolutely relevant to say that a clinic population is informative of a population at large.

But, again, I would reference that my opinion is primarily driven by what I'm seeing every day in my practice.

BY MS. BARNHART:

Q. You also -- in your report, in paragraph 37, you say:

"Research studies also support the idea that social media addictions are far more prevalent in younger individuals."

Do you see that?

A. I do see that.

Q. Neither of the studies -- or neither of the items that you cite to support that statement actually determined any prevalence of social media addiction among teenagers, did they?

A. That might be the case. I would have to reference and jog my memory of the specific studies to fully answer that question.

Q. You also cite to a Statista survey that you claim indicates that 40 percent of US respondents aged 18 to 22 reported feeling addicted to social media; correct?

A. Correct.

Q. You don't believe that is an accurate prevalence rate for social media addiction among the teen population of the 29 states you represent, do you?

A. I believe it was a simple survey asking, I believe, one question about this. And this is not intended to diagnose anyone, but I think it is important to reference that there is a survey that indicates 40 percent of US responders age 18 to 22 report feeling addicted to social media.

Q. Well, in fact, only 5 percent of the 18- to 22-year-old respondents said that the statement "I am addicted to social media" described them

completely; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: I would have to review and jog my memory of the study.
BY MS. BARNHART:
Q. Have you actually seen the study that's -- that underlies that number that you cite in your report?
A. I have.
Q. Is it your understanding that Statista ran that study?
A. I would have to review the study to fully answer that question and jog my memory.
Q. What is Statista?
A. You know, I would have to jog my memory to fully understand Statista's role in the survey.
Q. Do you believe Statista is a reliable source?
A. And I believe I would have to review the information material on Statista to continue answering that question accurately; but, you know, I thought this was a important survey to include.
Q. Did you identify this Statista metric or did Bates White identify it or your lawyers?
A. I again would have to jog my memory. I

believe I identified it. I could be mistaken, though.
Q. How did you identify it?
A. I don't recall exactly how I identified it.
Q. You didn't search any reputable scientific source for it, I assume?
MS. O'NEILL: Objection. Form.
THE WITNESS: I would have to really jog my memory to recall exactly how I came across this study -- survey.
BY MS. BARNHART:
Q. If you want to take the time at a break to go back and refresh yourself, that's fine. I again have limited time here.
Sitting here today right now, do you have any basis to believe that this Statista data is reliable?
MS. O'NEILL: Objection. Form.
THE WITNESS: I recall reviewing the survey, believing it was an interesting and reliable survey; but to fully answer that question, I would need to carefully, again, jog my memory and review the survey.
MS. BARNHART: Okay. I'm going to hand you what's been marked as Exhibit 19.

(Exhibit 19 was marked for identification and is attached to the transcript.)
BY MS. BARNHART:
Q. Does this refresh your recollection of how you found this Statista metric?
A. Of how I found it?
Q. Correct.
A. I don't believe this is any reference to how I found it.
Q. So no, you don't remember how you found this?
A. I do not recall how I found the survey at this time.
Q. Okay. With the benefit of this document, can you tell me who ran this survey?
MS. O'NEILL: Objection. Form.
THE WITNESS: You know, I would need to see the full documents, I think, to fully and accurately answer that question.
BY MS. BARNHART:
Q. This is the full document, Dr. Zicherman.
A. Well, I believe you referenced the company of statistic -- of Statista. I believe I would want to -- again, to accurately answer your question --

know more information.
Q. This is all the information you gave us. In your report in that footnote, this is the URL that you cite to.
Did you consider other information about this metric when you were forming your opinions?
A. About this metric?
Q. Correct. Other than this website, which is what your report directed us to.
A. Well, I certainly reference other information in the report.
Q. What information? Not about this metric. This is the only thing you cite in support of this 40 percent number.
And I'm asking you, based on this document, which is what you cited, can you tell me who ran this survey?
A. And I would have to go to the Statista website to fully clarify that information.
Q. So you can't tell based on this document, which is the website that you cited -- you cannot answer my question who ran this survey?
MS. O'NEILL: Objection. Form.
THE WITNESS: It may have, in fact, been Statista; but I would need to, again, reference

Statista to know the exact details that went into the actual company that ran this survey.
BY MS. BARNHART:
Q. How many participants were in the survey?
A. I do not recall offhand. I would have to, again, go back to the source and find that information.
Q. Okay. Dr. Zicherman, to be clear, this is the source. This is the source that you cited. So I'll ask you -- I'm not going to waste my time with more questions about this at this point.
On the next break, if you have any other source besides the one that you cited in your report that you're referring to, I'd ask that you produce it to us.
Okay? Will you do that?
MS. O'NEILL: Objection. Form.
THE WITNESS: I understand what you're saying.
MS. BARNHART: Okay. Let's take a break.
THE VIDEOGRAPHER: Stand by.
The time is 4:11 p.m., and we're going off the record.
(Recess taken.)
THE VIDEOGRAPHER: The time is 4:36 p.m.,

and we're back on the record.
BY MS. BARNHART:
Q. Okay. Dr. Zicherman, I'm looking at your report, which is Exhibit 1, and I'm on paragraph 4.
Let me know when you're there.
A. Yes.
Q. And, actually, before I ask you any questions about this, were you able to find any other sources for that Statista metric we were discussing earlier?
A. I did not.
Q. Okay.
Paragraph 4 under your summary of opinions states:
"Many Instagram features are harmful to teen and youth mental health, and Meta's teen accounts are often ineffective at addressing those harms."
Do you see that?
A. Correct.
Q. Is your Opinion Number 4 here, is that limited to Instagram?
A. It is, first and foremost, primarily driven at Instagram as that is the predominant app that my

patient population is using.
Q. And if you turn to page 16 of your report, which is Section 4, is this the section of your report that describes the bases for this fourth opinion that you have?
A. That is --
MS. O'NEILL: Objection. Mischaracterization.
MS. BARNHART: Let me -- I'll withdraw the question.
BY MS. BARNHART:
Q. All I'm trying to do is line up the opinion you state in paragraph 4 with the heading in Section 4. They appear to be the same to me.
A. Paragraph 4 and Heading 4?
Q. I'm sorry. Am I confused?
MS. O'NEILL: I think it's Section 5 -- just if it's helpful, I think it's Section 5 in the report.
MS. BARNHART: My bad.
Yes. I'm sorry.
Thank you, Counsel.
BY MS. BARNHART:
Q. So now, if we're looking at page 23, Section 5 --

A. Yes.
Q. -- is this the section of your report that describes the bases for your fourth opinion?
A. I believe that is correct.
Q. Okay. And I've read this section of your report, and I -- well, it appears to me that the primary, if not sole, basis for this opinion is your clinical experience; correct?
A. That does remain the primary basis of my opinion.
Q. Are you aware of any peer-reviewed studies that support your opinion?
A. Regarding the specific harms of these specific features that I listed?
Q. Yeah, let me rephrase.
Are you aware of any peer-reviewed study that isolates the effects of Instagram features on teen mental health from any effect of content exposure on Instagram?
MS. O'NEILL: Objection. Form.
THE WITNESS: I'm aware of reports that might detail certain mechanisms that are involved in the Instagram app.
BY MS. BARNHART:
Q. And I'm asking are you aware of any

peer-reviewed study that seeks to isolate the effect of any particular Instagram feature on teen mental health?

MS. O'NEILL: Objection. Form.

THE WITNESS: I would have to kind of carefully review the data again. I don't believe there are many reports that specifically might look at the Instagram app specifically.

BY MS. BARNHART:

Q. In your clinical practice when you're working with patients, do you consider and rule out exposure to content on Instagram as a primary contributor?

MS. O'NEILL: Objection. Form.

THE WITNESS: Can you rephrase the question.

BY MS. BARNHART:

Q. Sure.

So your opinion, as I understand it, is that many Instagram features are harmful to teen mental health; correct?

A. Correct.

Q. And my question is, basically, how did you figure that out through your clinical experience?

So how did you go about isolating the

effects of any Instagram features on teen and youth mental health?

A. I do try and assess for specifics of the Instagram use of the patients that I am working with.

I would say what I would take away as most important for developing my opinion, though, is that these features exist. They supposedly exist, according to Meta. And whether they're there or not, they're clearly not effective with the patients that I am working with.

And I get that report from parents. And I get the report from the patients themselves that they're not really doing anything to change their use.

Q. When you're referring -- in your answer just now, when you're referring to features, are you talking about the teen accounts feature?

A. It's my understanding that teens are supposed to be in teen accounts at this point.

I will say, though, that I encounter many teenagers who have -- and I've referenced this in the report -- have burner accounts, accounts parents aren't aware of -- that do not have teen accounts.

But, you know, we can talk about them

separately or together.

Q. All right. Well, let me just back up because I'm talking about the first part of your opinion here, which is just the part where you say:

"Many Instagram features are harmful to teen and youth mental health."

What features are you referring to there?

A. Features that are harmful to health?

Q. Correct.

So am I correct that your opinion is that many Instagram features are harmful to teen and youth mental health?

A. Yes.

Q. Okay. What features do you mean?

A. Well, I did list the features that I believe are problematic, which I can point to.

Some include Sleep Mode, the idea of time limit reminders. Sure, the idea that -- it's not clear to me working with patients if sensitive content is actually restricted in conversations with teens.

Globally, though, I would again reference the point that, when I talk to families and patients, it's more that they just tell me --

parents will tell me, "None of this works," that there are tremendous amounts of harms that these patients are facing.

Parents might have attempted limits and restrictions, but these patients that I'm working with will often act out violently. They might claim to -- or actually develop suicidal ideation, maybe homicidal ideation in regards to parents attempting to limit accounts.

And, again, parents telling me that these features don't seem to actually make a difference in the amount of time that their teenagers -- children or teenagers are on the apps -- or on the app.

Q. Okay. So I'm just trying to understand what features you are going to opine are harmful to teen and youth mental health.

Is it your opinion that Instagram's Sleep Mode feature is harmful to teen mental health?

MS. O'NEILL: Objection. Form.

THE WITNESS: I believe that it could be taken certainly a step further in that -- it's my understanding that Sleep Mode goes into effect at 10:00 p.m.

Well, there are several psychological, psychiatric organizations -- I believe the surgeon

general as well -- have recommended that teenagers should be asleep -- sorry -- should be off of their electronic devices an hour before bedtime.

And if the app shuts off at 10:00 p.m., for instance, 11:00 p.m. can be a late bedtime potentially for a teenager.

BY MS. BARNHART:

Q. Okay. We're going to come back to my question, but just on the point that you just raised, in Footnote 40 of your report, you cite a 2015 Stanford news article titled "Among teens, sleep deprivation is an epidemic."

A. Correct.

Q. And do you recall that that article actually found that teenagers' circadian rhythm, their internal biological clock, shifts to a later time, making it difficult for them to fall asleep before 11:00 p.m.?

MS. O'NEILL: Objection. Form.

THE WITNESS: I would have to refresh my memory and recollection of what you're referencing in that study.

BY MS. BARNHART:

Q. You're not a sleep specialist; right, Dr. Zicherman?

A. I do not have a fellowship in sleep medicine; but as a psychiatrist -- child analyst and psychiatrist, addiction psychiatrist, sleep concerns come up all the time in clinical practice.

Q. Do you have any reason to dispute the finding in this study or in an article that you cite in your own report that teenagers have difficulty falling asleep before 11:00 p.m. because of their natural circadian rhythm?

MS. O'NEILL: Objection. Form.

THE WITNESS: You know, I think to accurately answer that question, I would need to refresh my memory of the article in question.

BY MS. BARNHART:

Q. All right. You can do that on the next break and let me know if that changes your view.

Now, going back to my question, I think we're talking past each other. I'm interested in what features you believe are actively harmful to teen and youth mental health.

Is it your view that Sleep Mode is actually harming teen and youth mental health or simply that it's not doing enough?

A. Well, I believe it's not doing enough, and it might potentially lead to some harm with the

limits that are currently set.

Q. How? What's the causal mechanism there?

A. There are potentially teenagers who need to be asleep well before 10:00 p.m. And I think it's going to be difficult for a child or teenager to stop using electronics and -- according -- in accordance with recommendations from several important organizations we have within psychiatry, psychology and get restful sleep.

Q. Is it your understanding that the states that you represent allege that Sleep Mode is a harmful feature of Instagram?

MS. O'NEILL: Objection. Form.

THE WITNESS: I would have to, again, consult about the specifics of every aspect of the app, but I do believe that that is one of the aspects that is considered harmful in this case.

BY MS. BARNHART:

Q. Okay. Besides Sleep Mode, you referenced time limit reminders.

A. Correct.

Q. And you're referring to the time limit reminders that are built into the teen accounts feature on Instagram?

A. Correct.

Q. Okay. So those time limit reminders provide options to users to self-restrict their time used on Instagram; correct?

A. Time limit reminders provide an option to self-restrict. It's my understanding that -- again, we might be having some semantic issues here, but that time limit reminders will periodically alert someone that they've been on the app for a certain period of time.

Q. Okay. And how do you believe those reminders are causing harm?

A. I believe that it serves as just another reminder that these kids are on the app. It serves as another potential -- maybe even hit of dopamine. And it's also really easy to just swipe away and say, "I'm staying on the app."

It's not a hard-set feature that shuts the app off. I believe that it serves as a tool that could potentially even reinforce a child or teenager's use if they are on the app.

Q. And what is the basis for your belief?

A. An understanding of mechanisms of how addictions work, how -- my understanding of dopamine, and also asking patients -- primarily asking patients in my practice if a tool that Meta

is trying to implement like that is actually effective or not.

Q. Whether a tool is effective or not is different from whether it's actively causing harm.

Has any teenage patient or parent of a teenaged patient ever told you "Instagram's teen account time limit reminder is harmful to me"?

MS. O'NEILL: Objection. Form.

THE WITNESS: Well, again, I would say that the harm comes in the form of the fact that it appears, when I ask patients about that particular tool, that they are not getting off the app. And they easily swipe away, and it serves to continue to remind them that they are engaging with the Instagram platform.

BY MS. BARNHART:

Q. So you believe that providing an option to users to self-restrict time used on a platform is harmful in and of itself?

A. Well, I don't believe it's actually a form of self-restricting if you can just swipe away and continue using the app.

Q. Well, it's providing an option to users to self-restrict; right? It's a reminder?

A. It serves as a reminder that you can easily

dismiss.

Q. Okay. You could easily not dismiss it; right?

MS. O'NEILL: Objection. Form.

THE WITNESS: Sure. There could be a patient out there -- a child out there that -- or teenager that might see the reminder and actually stop using the app.

But in my clinic and my experience, that is not what is happening or being reported to me.

BY MS. BARNHART:

Q. And, again, I don't think you ever answered my question of have you ever had a teenage patient or parent of a teenage patient tell you that Instagram's teen accounts time limit reminder is harmful to them.

MS. O'NEILL: Objection. Form.

THE WITNESS: In those exact words, I've not had that repeated to me. But, again, I do believe in other ways that information has been conveyed to me.

BY MS. BARNHART:

Q. Can you describe to me without revealing any personal identifying information a patient who's presented in a way that made you believe Instagram's

time limit reminders are harming that patient?

MS. O'NEILL: Objection. Form.

THE WITNESS: Yeah, I -- again, I think I would have to refrain from specifics about a patient.

BY MS. BARNHART:

Q. I didn't ask for any personal identifying information. I just asked for basically a case report, which I assume you do frequently; correct?

A. A case report?

Q. Correct. I mean, at grand rounds with other of your colleagues, you're talking about patients without revealing personal identifying information; correct?

A. Sometimes.

Q. Okay. So how about can you do that for me now? Can you describe to me without revealing any personal identifying information any specific presentation that has led you to conclude that Instagram's time limits reminders are causing harm to teenage mental health?

A. Well, yeah, I think the best way I can answer that is by saying that I inquire about features of the app such as time limit restrictions and if they are effective, if my patients are

actually using them and getting off the app or if it just serves them as a reminder that they're on it.

And, you know, the answer I usually get is, "Yeah, you know, I tend to just dismiss it." And I believe it does therefore lead to harm considering that it's not aiding these kids get off the app.

Q. Okay. So we've got Sleep Mode, time limit reminders, and then you mentioned sensitive content.

A. Yes.

Q. Can you describe to me a specific patient encounter, without revealing any personal identifying information, that led you to believe sensitive content viewed on Instagram was causing that teenager mental health harm?

MS. O'NEILL: Objection. Form.

THE WITNESS: It's a pretty common refrain from patients that they tell me they are exposed to content relating to eating disorders, self-harm, potentially methods of suicide, and also information about -- well, drug glorification, and also how to actually procure substances through the app.

I would consider that sensitive content.

BY MS. BARNHART:

Q. Okay. Do you have any understanding of the distinction between features and content as is

relevant to this litigation?
A. Between --
MS. O'NEILL: Objection. Form.
THE WITNESS: Between features and content. It's my understanding that there is separation there between features and content.
BY MS. BARNHART:
Q. What is your understanding of that separation?
MS. O'NEILL: Objection. Form. Calls for a legal conclusion.
THE WITNESS: That features are separate from content. Sleep time is not -- or Sleep Mode is not content.
BY MS. BARNHART:
Q. Okay. But sensitive content is content; right?
MS. O'NEILL: Objection. Form.
THE WITNESS: It's a form of content.
BY MS. BARNHART:
Q. Okay. And in your report -- or in your clinical practice -- I guess we'll start with that.
In your clinical practice, when you're assessing a patient, do you consider and rule out content as opposed to features in terms of how the

Instagram app is affecting your patients?
MS. O'NEILL: Objection. Form.
THE WITNESS: I certainly think about content. From my experience, the majority of cases I'm working with, it appears that the app features are really responsible for the problems I'm seeing; but, sure, content and features, I have to say honestly, can go hand in hand.
BY MS. BARNHART:
Q. And if you were to produce your clinical notes to us in this case, would you expect that there would be specific notations of specific features of Instagram that you believe to be causing harm to your patients?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, I believe I already referenced that I did not rely on my clinical notes in forming my opinion.
BY MS. BARNHART:
Q. Can you answer my question?
MS. O'NEILL: Objection. Argumentative.
THE WITNESS: Again, you're asking me to reference clinical notes. Clinical notes are dynamic. And I'd have to, you know, carefully review for material. And, again, I did not rely on

notes for developing my report.
BY MS. BARNHART:
Q. Do you have any recollection, sitting here today, of ever writing down in a clinical note that a specific feature of Instagram, separate and apart from content, caused mental health harm to one of your patients?
MS. O'NEILL: Objection. Form.
THE WITNESS: I cannot recall at this moment.
BY MS. BARNHART:
Q. So we've got Sleep Mode, time limit reminders. Are there any other features that you will opine cause harm to teen mental health?
A. I would like to -- what section was that again? Paragraph?
Q. I was looking at the heading in Section 5:
"Many Instagram features are harmful to teen and youth mental health."
A. Right. I reference, for instance, the idea that Instagram is supposedly prohibiting users under ages 16 from going live and automatically blurring images. I hope that's happening.
I know that maybe some of these features

that were mentioned in Meta reports have not actually been implemented. I don't have all of that information.
I certainly hope that accounts are considered private and there are messaging restrictions. But I also hear from my patients that in various ways these restrictions are easy to bypass.
Q. Okay. At this point, I think you're basically reading me your report. So I want you to just tell me -- I mean, I'm just looking for the names of features.
What are specific features that you believe are causing harm to teen mental health?
MS. O'NEILL: Objection. Form.
THE WITNESS: I believe I have answered that question. I think, to some extent, all the features I've listed in the report can potentially amount to harm -- at the minimum, are just not effective. If they're not effective, then I think you can argue that there's harm.
BY MS. BARNHART:
Q. Let's do it this way. You tell me if I miss anything. Okay?
A. Okay.

Q. In paragraph 36 of your report -- this is in a different section, but I just want to ask you about it.

And it's actually paragraph 36 but at the top of page 15.

You say in the sentence starting "They do not know" --

A. Uh-huh.

Q. You say:

"They do not know" -- "they" being adolescents -- "do not know when they check a social media account if there will be a new post, a new like, a new subscriber or follower, or targeted content that will trigger a dopamine release."

Do you see that?

A. Correct.

Q. Is it your opinion that posts on Instagram are a feature that causes teen mental health harm?

MS. O'NEILL: Objection. Form. Mischaracterization.

THE WITNESS: Well, I think you're asking about maybe content, but the act of a post isn't what necessarily causes harm; it's the act of

developing an addiction process through constant dopamine release that is what's concerning, which amounts to checking if there is a new post, a new subscriber, a new video, et cetera, which, again, triggers a dopamine cascade and is responsible for an addiction process and goes along with the lines of the fact that it's clear to me that the Instagram app functions very much like a slot machine with a variable reward mechanism.

BY MS. BARNHART:

Q. Okay. That was not answering my question, but I think maybe buried in there there is an answer. So let me just read this.

You say that it's the dopamine -- the constant dopamine release that is causing harm. Is that your opinion?

MS. O'NEILL: Objection. Form.

THE WITNESS: The dopamine release is associated with -- it's part of the mechanism that does, in fact, lead to harm from the use of the app.

BY MS. BARNHART:

Q. And dopamine is released when users view new posts, new likes, a new subscriber or follower or targeted content; correct?

A. Correct.

Q. Okay. And you -- so aside from those things we just listed, are there any other things that you believe are features of Instagram that cause harm to teen mental health?

A. The way that I can best answer that is that these restrictions sound nice. They sound like maybe they should be helpful.

And what I can tell you is that when I work with my patients, I work with the parents of my patients, they tell me that these restrictions that are supposed to be built into the app are not working and are not effective. They tell me they have tried measures to restrict access, to limit access, and it just isn't working.

Q. Okay. For now, Dr. Zicherman, I'll ask you to set aside the teen accounts protections that Instagram has implemented, and I want you to think of an account that has no teen accounts protections to it.

What features of Instagram in that scenario do you believe are causing harm to teen mental health?

A. Well, I believe the general mechanism of the app would cause harm, as well as I believe with a general Instagram account, that would mean that a

parent does not have the ability to regulate or potentially moderate content or amount of time spent on the app.

Q. What do you mean by "the general mechanism of the app"?

A. Meaning how -- if in theory, say, a teenager had a regular Instagram account, that there would be no potential protective mechanisms in place. That would lead to potentially significant overuse of the app.

In addition to other concerns regarding unregulated content, I have to mention both of those factors.

And, again, I would have to say that these restrictions might supposedly exist, but they do not work with the patients that I am working with.

Q. So is the harm you're identifying potentially significant overuse of the app?

A. Time is a factor in problems with the app.

Q. I want to direct you to paragraph 57 of your report. The first sentence of this paragraph says:

"There are many features of Instagram that are harmful to youth based on my clinical experiences."

Do you see that?
A. I do.
Q. And you don't cite any support for that statement other than your clinical experiences; correct?
A. That's correct.
Q. And we don't have access to your clinical experiences other than what you're telling me here today and what you've written in your report; correct?
A. That's correct.
MS. O'NEILL: Objection. Form.
THE WITNESS: That's -- that's correct.
BY MS. BARNHART:
Q. And then you go on to list "Instagram features that increase app time use in youth."
And I just want to understand before we get into those features that you list, are you saying that any Instagram feature that increases app time use in youth is harmful to mental health?
MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: It can potentially be harmful. Of course, there is a spectrum of teenagers out there. I am working with teenagers

who have significant mental health problems because of, I believe, how the app is designed.
BY MS. BARNHART:
Q. Okay. But you agree that there are millions of teenagers that use Instagram every day who do not experience any harm; correct?
MS. O'NEILL: Objection. Form. Foundation.
THE WITNESS: I'm not polling millions of teenagers. I think it's reasonable to say that there is a significant number of teenagers that likely are experiencing harm with this. I can most accurately comment on the patients that I am working with.
BY MS. BARNHART:
Q. You're certainly not seeing millions of teenagers come through your clinic claiming they have social media addiction; correct?
A. I am certainly not seeing millions of teenagers in my clinic.
Q. And you go on to list some features in paragraph 57 of Instagram features that increase app time use in youth.
So the first one you say is push notifications.

Do you see that?
A. Yes.
Q. And you have a smartphone, I assume?
A. I have a smartphone.
Q. And you have apps on that smartphone?
A. I have apps on my phone.
Q. You understand that notifications are optional with almost any app that's available on a smartphone?
MS. O'NEILL: Objection. Form.
THE WITNESS: I'm not an expert on the technicalities of how my phone might work.
BY MS. BARNHART:
Q. You do understand, though, that push notifications are not a feature that is unique to Instagram; right?
A. There are other apps that surely use push notifications.
Q. In your clinical work with teenage patients, do you make any attempt to consider or rule out the effects of push notifications from other apps besides Instagram?
MS. O'NEILL: Objection. Form.
THE WITNESS: I try and assess for this as accurately as possible. Also, most of the patients

that come in and work with me, they don't really want to share much information about their use of the app and platform, but it consistently is a significant problem among the patients that I'm working with.
BY MS. BARNHART:
Q. How do you know it's a significant problem if your patients don't share information about their use of the app and platform?
MS. O'NEILL: Objection. Form.
THE WITNESS: I think it's common for patients to acknowledge that they have a problem with their use and also maybe not want to make a change, which is a pretty common feature of an addiction.
And I will have parents come into the clinical evaluation saying they believe that it's the app that is causing all this harm and disruption and dysregulation in their lives.
BY MS. BARNHART:
Q. Have you ever had a teenage patient or their parent tell you, "Push notifications on Instagram are causing harm and disruption and dysregulation in my life"?
MS. O'NEILL: Objection. Form.

THE WITNESS: They don't have to tell me that for me to understand that it's harmful; but no, teens are typically not telling me that the push notification is, you know, harmful.

BY MS. BARNHART:

Q. And you've listed a number of other features here: automatically play video, infinite scrolling, gamification, autoplay, and reels, and recommendation algorithms.

Do you see those features?

A. Yes.

Q. Have you read the judge's order on Meta's motion to dismiss in this litigation?

A. On Meta's motion to dismiss? I'd have to refresh my recollection of --

Q. It's not on your materials considered list.

A. Okay. All right.

Q. Maybe we can just cut to the chase.

If it's not there, you probably didn't read it; right?

A. That sounds correct.

Q. Did counsel provide you any sort of assumptions or other information based on that order as to what features are at issue in this case?

A. I'd have to refresh my recollection with

documents provided by counsel.

Q. Okay. In your report at paragraph 56, you claim that teen accounts were not implemented until September 2024; is that right?

A. I do state that.

Q. Are you aware that all of the protections included in teen accounts were available to teen users prior to September 2024 and in some cases many years prior?

MS. O'NEILL: Objection. Form.

THE WITNESS: I would have to carefully review the Meta documents in relation to restrictions they have regarding the app and timeline. This is my understanding.

BY MS. BARNHART:

Q. And you didn't seek to investigate that issue?

A. I tried to investigate to the best of my abilities, but it's challenging at times to keep all this information straight in Meta's release enabled 2025, which I do reference. That's a claim that, in the next couple of months, to begin prohibiting Instagram users under 16 from going live, for instance.

Has that happened? I mean, it's difficult

to keep up with the time frame of when and if these features have been implemented.

Q. And probably the best people to answer that question of when and if these features have been implemented are employees of Meta; right? Not you?

MS. O'NEILL: Objection. Form. Foundation.

THE WITNESS: An employee of Meta probably knows, depending on the role at Meta, when certain features might be implemented.

BY MS. BARNHART:

Q. We've been talking a lot today about your clinical experience and how that forms the basis of your opinions in this case. I know you're aware of that. I have a few more questions about that.

If someone wanted to evaluate whether you had drawn reliable scientific inferences based on your clinical experience, how would that person do that?

MS. O'NEILL: Objection. Form.

THE WITNESS: I believe that my clinical work is a reliable scientific inference. Clinical work is -- it informs research, and it's also based on research.

And here again, I'll continue to say this,

that I'm seeing a significant problem with the patients I'm working with. I believe that the Instagram app is a primary contributor to what I'm seeing.

BY MS. BARNHART:

Q. My question is -- I understand you're going to come to trial and say that. How is a jury supposed to evaluate whether your say-so is reliable?

MS. O'NEILL: Objection. Form.

THE WITNESS: I can talk about what I know and how I reached my opinion, which is, again, primarily based off of the work that I do as a medical doctor with many years of experience and many fellowships behind my training working with this population that has significant concerns.

BY MS. BARNHART:

Q. So there's no way for -- well, let me ask you this:

Are you familiar with the concept of replication in scientific research?

A. You have to jog my memory.

Q. Okay. So in science the concept of replication is the process of repeating a study or experiment to see if the original results can be

obtained again, which is a measure of reliability.
A. Okay.
Q. Does that sound right to you?
A. That sounds accurate.
Q. Okay. Are you -- do you agree with me that your conclusions in this case, your opinions, which are based on your personal memories and clinical experience, can't be replicated by a third party?
MS. O'NEILL: Objection. Form. Calls for a legal conclusion.
THE WITNESS: Replicated by a third party? What would that third party be? Are we talking about another physician? What are we talking about?
BY MS. BARNHART:
Q. I'm talking about me. How would I replicate your methodology that you used to arrive at your opinions in this case?
MS. O'NEILL: Same objections.
THE WITNESS: Go to med school. Do residency, several fellowships, and find yourself working with a population of youth with addictions many years down the road.
BY MS. BARNHART:
Q. Okay. Is there any other way to replicate your -- the methodology that you used to arrive at

your opinions here?
MS. O'NEILL: Objection. Form.
THE WITNESS: I believe, again, if you have my training and experience, background with this clinic population, that would be how you can replicate this. Unfortunately, there aren't a whole lot of trained child and adolescent psychiatrists and trained addiction psychiatrists out there.
BY MS. BARNHART:
Q. How could I ensure that your memories of your clinical experience align with reality?
MS. O'NEILL: Objection. Form.
THE WITNESS: Again, I am here to report on -- to opine on -- I am here to discuss my report, my opinions. And as a medical doctor with many years of training behind me and work beyond training as a clinical associate professor, I would hope that that would be considered, you know, a reliable background to evaluate patients who I believe suffer from this problem.
BY MS. BARNHART:
Q. So it's your view that your credentials show -- demonstrate -- let me start over.
It's your view that your credentials on their own demonstrate the reliability of your memory

of your clinical experience?
MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: I think they certainly are a substantial part of what goes into my work. And if you want to call it reliability, okay.
BY MS. BARNHART:
Q. Can you point me to anything else that demonstrates the reliability of your memory of your clinical experience?
MS. O'NEILL: Objection. Form.
THE WITNESS: I can point to what I've referenced and discussed today, which is I have a clinic population that suffers, I believe, from significant concerns regarding social media use and addictions.
And I have a background that I believe is unique as a trained child and adolescent psychiatrist and addiction psychiatrist. There's not a whole lot of us out there.
BY MS. BARNHART:
Q. Yeah, but there's nothing -- there's no spreadsheet or summary memo or some other documentation of contemporaneous recordings of your clinical experience that you could point to and say,

"Look, I'm remembering correctly"; right?
You haven't produced anything like that to us?
MS. O'NEILL: Objection. Form.
THE WITNESS: Yeah, I've stated that I did not rely on clinical records to form my opinion.
BY MS. BARNHART:
Q. Okay. So we're supposed to trust your opinions simply based on your say-so; correct?
MS. O'NEILL: Objection. Form. Argumentative.
THE WITNESS: I'm here to provide my opinion whether someone wants to believe it or not.
BY MS. BARNHART:
Q. And it's -- you're asking us to believe your opinions simply because you say that they reflect your clinical experience; right?
MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: You can choose to believe what I'm saying or not; but I'm here to report on, again, what I believe I'm seeing daily within my clinical practice. Well, my opinions are formed by my clinical practice primarily.
///

BY MS. BARNHART:

Q. In paragraph 53 of your report, you describe some of your treatment practices.

Am I correct in understanding that one treatment that you provide for social media addiction is enforcing restricted phone and internet use?

A. I certainly do work with families on trying to build healthy family media use habits and planning.

Q. Okay. So if you believed -- if you believe Instagram is a primary contributor to a given patient's mental health concerns, do you ever recommend that that patient not use Instagram but continue to use their phone and the internet as they otherwise would?

MS. O'NEILL: Objection. Form.

THE WITNESS: I can see scenarios where there are times it's the Instagram platform, of course, and not the ability -- the idea of restricting phone otherwise that occurs.

BY MS. BARNHART:

Q. My question is, sitting here today, can you specifically recall treating any patient by telling them to delete the Instagram app but use all other

technology as normal?

MS. O'NEILL: Objection. Form.

THE WITNESS: I can't recall that particular scenario.

BY MS. BARNHART:

Q. You also in your report say that you treat youth with social media addictions using motivational interviewing, cognitive behavioral therapy, and family-focused therapy; correct?

A. Correct.

Q. Those are tools that can be used to treat depression, anxiety, and other nonaddiction mental health disorders; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: Correct.

BY MS. BARNHART:

Q. And if I'm understanding your opinions correctly, you believe that you can determine that social media addiction is causing these other mental health disorders because the treatment for social media addiction improves the other conditions; correct?

MS. O'NEILL: Objection. Form. Mischaracterization.

THE WITNESS: I do see frequently in my

practice that focusing primary efforts at improving the social media aspect of a patient's life leads to significant and sometimes complete resolution of the other presenting concerns.

BY MS. BARNHART:

Q. Motivational interviewing, cognitive behavioral therapy, and family-focused therapy are effective at treating other mental health disorders as well; correct?

A. That's correct.

Q. So how, if at all, can you just aggregate the effect of motivational interviewing, cognitive behavioral therapy, and family-focused therapy on the mental health disorder as opposed to the purported social media addiction?

MS. O'NEILL: Objection. Form.

THE WITNESS: So I'm a little confused by the question. If you can repeat or potentially rephrase it.

BY MS. BARNHART:

Q. Let's just try it this way.

If a teenager in your clinic reported having an eating disorder and also spending a lot of time on social media, how would you treat that patient?

Would you try to treat the eating disorder first?

MS. O'NEILL: Objection. Incomplete hypothetical.

THE WITNESS: Yeah, and I'm not -- I don't work in an eating disorder treatment program; so that scenario would not really apply to, generally, the work that I'm -- that I'm doing.

BY MS. BARNHART:

Q. Okay. So you're not offering any opinions about eating disorders?

MS. O'NEILL: Objection. Form. Mischaracterization.

THE WITNESS: Well, in regards to treating -- in regards to a patient who has met the medical criteria for an inpatient -- say, an eating disorder treatment program and who also might have concerning social media use? Yeah, I think you need to probably address both and, certainly, the medically compromising situation in the moment, which is the eating disorder.

Sure, in that scenario, you need to treat both.

BY MS. BARNHART:

Q. You would never simply take this teenager's

phone away thinking that would solve the problem of their eating disorder; right?

MS. O'NEILL: Objection. Form.

THE WITNESS: In that scenario, no. More would need to be done.

BY MS. BARNHART:

Q. In paragraph 15 of your report, you suggest that there are some situations where --

A. Which paragraph?

Q. 15.

You suggest that there are some situations where teenage patients with purported social media addiction should be considered for residential treatment center programs; is that correct?

A. Correct.

Q. Do you agree with me that residential treatment center programs were developed for substance disorders?

MS. O'NEILL: Objection. Form.

THE WITNESS: I'm not actually sure, among the history of residential treatment centers, that they were developed for substance use; but there are many that exist today for primary mental health treatment.

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BY MS. BARNHART:

Q. And residential treatment center programs typically last 30 to 90 days; is that right?

A. That's a typical time frame.

Q. Have you ever recommended to a parent that they send their child away from home for 30 to 90 days specifically to treat social media addiction?

A. That can be a scenario encountered with patients that I work with.

Q. Have you ever actually recommended to a parent that they send their child away from home for 30 to 90 days specifically to treat social media addiction?

A. I have discussed that as an option if they feel like there's no other option left and the family simply needs a separation and reset, and the parents then need the ability over 30 or 90 days to reset their home regulations and restrictions, particularly when it comes to technology use and, you can say, social media use.

Q. Have any patients of yours actually entered a residential treatment program to specifically treat their social media addiction?

MS. O'NEILL: Objection. Form.

THE WITNESS: I have patients, for a

variety of reasons, that have entered residential treatment programs. That is not an unexpected occurrence working with patients with addictions.

BY MS. BARNHART:

Q. Do you remember my question, Dr. Zicherman?

A. You can rephrase it or restate it.

Q. Have any patients of yours actually entered a residential treatment program specifically to treat their social media addiction?

MS. O'NEILL: Objection. Form.

THE WITNESS: Well, I would say again it's not -- whether that was an outcome, it's not necessarily relevant to the genesis of the report.

But, again, I have had patients for a variety of reasons, which you can say can include behavioral addictions, that have ended up at residential treatment.

BY MS. BARNHART:

Q. Do you remember my question?

A. I'm happy to hear you state it again.

Q. Did you forget it a second time?

A. Well, I believe I answered your question to the best of my abilities.

Q. You didn't. You're not -- you're not. So please listen to it.

Have you ever -- let me start over.

Have any patients of yours actually entered a residential treatment program specifically to treat their social media addiction?

MS. O'NEILL: Objection. Form.

THE WITNESS: I think that goes towards patient specifics, but, again, I can globally say, working as a child and adolescent psychiatrist with a background in addictions, that I certainly have seen patients end up at residential for a variety of reasons, including concerns regarding technology use, which can include social media use.

BY MS. BARNHART:

Q. Do you have a specific patient in mind who has been sent to a residential treatment facility for 30 to 90 days because of social media addiction?

MS. O'NEILL: Objection. Form.

THE WITNESS: I'm not here to comment about specifics of my patients. I can comment generally that this is a part of treatment that sometimes is necessary.

BY MS. BARNHART:

Q. So I'm going to take that as a no. I'll frame it that way.

You have never sent a teenage patient of

yours to a residential treatment facility for 30 to 90 days because of social media addiction; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: I've never sent anyone to residential. It can be part of a recommendation, and a family may choose to admit their child to a voluntary residential treatment program, which is what exists in the state of California.

BY MS. BARNHART:

Q. You have never recommended to a parent of a teenage patient that they institutionalize their teenager for 30 to 90 days because of social media addiction; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: It might be among concerns that have come up in -- again, patients that are -- that end up at residentials.

Again, the nature of my work, I work with lots of patients. Patients can end up in a residential setting. This is not an uncommon occurrence. And I also work at a residential setting.

BY MS. BARNHART:

Q. That has nothing to do with social media addiction; right?

A. My work at Alta Mira?

Q. Correct.

A. There are patients that could potentially have technology use concerns, but they're also adults.

Q. And it's a substance use residential treatment facility? That's what it advertises itself as?

A. That's true. It is primarily a substance use treatment program.

Q. All right. Can you name any adolescent residential treatment programs that your patients have attended because of social media addiction?

MS. O'NEILL: Objection. Form.

THE WITNESS: I can't recall that information offhand.

MS. BARNHART: All right. Let's take a break.

THE VIDEOGRAPHER: Stand by. The time is 5:32 p.m., and we're going off the record.

(Recess taken.)

THE VIDEOGRAPHER: The time is 5:57 p.m., and we are back on the record.

BY MS. BARNHART:

Q. Dr. Zicherman, returning to something we

were talking about earlier, if a teenage patient in your clinic was experiencing suicidal ideation and self-harm behavior and also reported spending a lot of time on social media, you would treat the suicidal ideation and self-harm first; correct?

MS. O'NEILL: Objection. Form. Incomplete hypothetical.

THE WITNESS: Yeah, I would agree that that is a challenging hypothetical and an incomplete hypothetical to work through; but in a vacuum, yeah, of course you have to treat primarily an acute condition like suicidality.

BY MS. BARNHART:

Q. You wouldn't simply take that teenager's phone away and expect that to cure their suicidality; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: No. I do not believe that to be the case. And I think, in your scenario, actually giving power to the idea of an addiction, I think that if you have someone who has suicidality, maybe they already had concerning social media use. Take away their ability to access that when they're suicidal, you could get an extinction burst, which means things could get worse before they get better.

(Stenographer interrupted for clarification of the record.)

BY MS. BARNHART:

Q. What about the situation of a teenager in your clinic who presents with clinical depression and also reports spending a lot of time on social media? Would you treat the clinical depression first?

MS. O'NEILL: Objection. Form. Incomplete hypothetical.

THE WITNESS: Well, I think if you -- in that scenario, you know, you need to know more about severity of the depression presentation, or you believe that -- you know, I'm working with patients in my clinic who I believe have a primary social media addiction concern, which means they also might come in with certain elements of depression.

And in order to address those depressive symptoms, I find that just directly addressing, in so many cases, the concerning social media use ends up either completely resolving or remitting the symptoms of depression.

BY MS. BARNHART:

Q. You wouldn't simply take the phone away from that teenager and expect their clinical

depression to get better, would you?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, you're asking about a phone now. It depends on -- it depends on a situation. I would really need more details about a scenario.
BY MS. BARNHART:
Q. You wouldn't simply tell that teenager, "Delete the Instagram app; that will cure your clinical depression," would you?
MS. O'NEILL: Objection. Form.
THE WITNESS: In certain situations, that might eventually be the answer. But if you have someone especially who's coming in with high acuity concerns, I think you have to delicately navigate those concerns, at least initially, when you meet with the patient.
BY MS. BARNHART:
Q. What if a teenager presented at your clinic with clinical anxiety and also reported spending a lot of time on social media?
Similarly, you wouldn't simply tell that teenager to delete the Instagram app, you -- sorry. Let me start that again.
If a teenager presented at your clinic with

clinical anxiety and also reported spending a lot of time on social media, you wouldn't simply tell that teenager to delete the Instagram app, would you?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, again, in that scenario, I would need it -- I would need more details, and I would need to, you know, understand more information about the severity of the anxiety, how long it's been going on for, and try to understand the intersection of anxiety and their social media use.
BY MS. BARNHART:
Q. Is it your opinion as a medical practitioner that having a teenager delete their Instagram app could potentially cure clinical anxiety?
MS. O'NEILL: Objection. Form.
BY MS. BARNHART:
Q. That and that alone?
A. There are certain situations and scenarios where I do believe that could be the case.
Q. Have you ever treated a patient where the only thing you did for the treatment of the patient was to tell the patient to delete an Instagram app off of their phone?

A. I don't recall any scenarios where the first thing I did and the only thing I did was say delete -- or direct the teenager to delete the app.
Q. That's because you also use treatments like CBT, talk therapy, family therapy to treat social media addiction and clinical mental health disorders; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: These are broadly applicable forms of treatment, and it's the best we have right now when we have an emerging significant concern which is social media addiction in youth.
BY MS. BARNHART:
Q. Okay. We've talked a lot about dopamine today. I have a few more questions for you on that point.
If you can turn to paragraph 21 of your rebuttal report, which I believe is Exhibit 3.
MR. BOOTH: 4.
BY MS. BARNHART:
Q. 4. Sorry.
A. And which page?
Q. It's paragraph 21, which is on page 10.
Okay. So in paragraph 21 of your rebuttal report, you say:

"First, the role of dopamine in both substance and behavioral addictions is well established."
Do you see that?
A. Yes.
Q. And you cite three -- you cite three things to support that statement; correct?
A. I believe that is -- I certainly cite 39, 40 --
Q. Well, I'm just talking about this first sentence.
A. Okay.
Q. And so that's -- Footnote 39 corresponds to that first sentence; right?
A. Yes.
Q. Okay. So the basis for this statement are these -- the sources that are cited in Footnote 39; right? You're not basing this statement on your clinical experience?
A. That is correct. That statement is attributable to the material in Reference 39.
Q. Okay. The first item that you reference -- or that you cite in Footnote 39 is a 2005 article by Eric Nestler; correct?
A. Correct.

Q. In 2005, social media didn't exist; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: I'm not sure if that is correct or not. There have been several social media platforms that have existed before Instagram.

BY MS. BARNHART:

Q. Okay. Well, Instagram certainly didn't exist in 2005; correct?

A. I believe that is correct.

Q. You earlier told me that social media was only in its infancy when the DSM-5 was published in 2013; correct?

A. Correct.

Q. And this is eight years before that; right?

A. That would be correct.

Q. Okay. So this 2005 article does not say anything about social media addiction and the role of dopamine, if any, in that; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: I would have to refer back to the article to see if there's a specific mention of social media.

BY MS. BARNHART:

Q. Okay. Would it surprise you if I told you

there was no specific mention of social media addiction in a 2005 article?

MS. O'NEILL: Objection. Form.

THE WITNESS: That might be the case.

BY MS. BARNHART:

Q. The second item you cite is a 2021 article by Andrew Westbrook and a number of others.

Do you see that?

A. Yes.

Q. This article is titled "Striatal Dopamine Synthesis Capacity Reflects Smartphone Social Activity." Correct?

A. Correct.

Q. Am I correct that this study did not actually assess any -- any people who have been diagnosed with any form of addiction?

MS. O'NEILL: Objection. Form.

THE WITNESS: Can you repeat that. I just got distracted by the screen there.

BY MS. BARNHART:

Q. Oh, sure.

What's on your screen?

A. I just -- I think there's some changes with the highlighting I was looking at.

Q. Is it your report? I just want to make

sure you're looking at the right thing.

A. Yeah. Well, I was kind of flipping between two to make sure that it was the same. Sorry.

Q. No, no worries. Let me say that again, if I can remember what I said.

Am I correct that this 2021 Westbrook study did not actually assess any individuals diagnosed with any form of addiction?

MS. O'NEILL: Objection. Form.

THE WITNESS: I would have to jog my memory, looking at the report to fully answer that.

MS. BARNHART: All right. Well, why don't we go ahead and mark that.

(Exhibit 21 was marked for identification and is attached to the transcript.)

MS. BARNHART: What exhibit is this?

MR. LaGRAND: 21.

BY MS. BARNHART:

Q. You've been handed what's been marked as Exhibit 1. This is a copy of the -- sorry -- Exhibit 21, which is a copy of the Westbrook article we've been talking about; correct?

A. Correct.

Q. And if you -- you can feel free to take a

look if you'd like, but my question for you is whether you agree that the participants in this study were healthy individuals with no diagnosis of addiction.

MS. O'NEILL: Objection. Form.

THE WITNESS: I would have to spend some time refreshing my memory regarding this study and your question of healthy individuals, I believe it was, or healthy subjects.

BY MS. BARNHART:

Q. Okay. Well, you can set that to the side. If you'd like to review it in detail during a break, that's fine. And you can let me know if you dispute my summary of this as a study that did not assess any individuals who were actually diagnosed with addiction. Okay?

A. Okay.

Q. Okay. And then the third thing that you cite in this footnote is an article by Min Liu dated in 2015.

Do you see that?

A. Where's -- where are you referencing?

Q. The Footnote 39.

A. Yes.

Q. And the title of that article is

"Relationship Between Peripheral Blood Dopamine Level and Internet Addiction Order in Adolescent -- Internet Addiction Disorder in Adolescents."

Do you see that?

A. I do.

Q. So this is a study of dopamine outside of the brain; right? In the blood?

A. I believe that is correct.

Q. And dopamine -- in your understanding, can dopamine readily cross the blood-brain barrier?

A. I would have to refresh myself with the study and information on whether it crosses the blood-brain barrier.

Q. Well, I'm just asking you, as a general matter of anatomy, does dopamine cross the blood-brain barrier?

A. To accurately answer that question, I would want to reference that study.

Also, that might be a question for a neuroscientist to answer.

Q. Okay. I can represent to you the study does not answer this question, which is why I was asking you.

But you don't feel equipped to answer whether dopamine can cross the blood-brain barrier?

MS. O'NEILL: Objection. Form.

THE WITNESS: The mechanism of dopamine is far less important to me than what I'm actually seeing in my clinical practice.

Whether the mechanism is the dopamine pathway that is described or not, that is not a substantial part -- or wasn't for my clinical practice.

BY MS. BARNHART:

Q. Okay. Well, we'll get to that in a second, but I'm asking you about the basis for your statement that the role of dopamine in both substance and behavioral addictions is well established.

I assume you still stand by that statement; correct?

A. Correct.

Q. And I'm asking you about the bases for that statement.

We've talked about an article that was published before social media existed, another article that didn't actually assess addicted participants, and we're now talking about a third article that looked at blood dopamine levels; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: There's a chance -- again, I have to look at time frames that social media did exist prior to that one article that you cited, perhaps not Instagram but other platforms.

BY MS. BARNHART:

Q. Is it your understanding that peripheral blood dopamine can be used as a measure of dopamine activity in the brain?

A. I would have to reference the study in question.

Q. I can represent to you there's no -- any answer to that question in this study.

A. Okay.

Q. So can you answer that based on your medical knowledge?

Does peripheral blood dopamine reflect a measure of dopamine activity in the brain?

MS. O'NEILL: Objection. Form.

THE WITNESS: You can ask a neuroscientist who specializes in dopamine that question. And the mechanism of how dopamine is leading this cascade of what I believe is significant social media use concerns, regardless of the mechanism, I'm seeing what I'm seeing in my clinical work. And that is

what primarily has informed my opinion in this matter.

BY MS. BARNHART:

Q. Okay. You said earlier -- you testified earlier today that you have a doctor's understanding of dopamine.

Do you recall that testimony?

A. I do.

Q. So that doctor's understanding of dopamine doesn't include an understanding of whether dopamine can cross the blood-brain barrier; correct?

A. I doubt most physicians have an understanding of whether dopamine can cross the blood-brain barrier.

Again, feel free to ask a neuroscientist.

Q. Okay. I don't have one in the room with me today, which is why I'm asking you.

So, sitting here today as -- with a doctor's understanding of dopamine, can you tell me why this Liu 2015 article about peripheral blood dopamine levels would be at all relevant to the question of whether behavioral addictions release dopamine in the brain?

MS. O'NEILL: Objection. Form.

THE WITNESS: I would have to again

carefully review the article to appropriately and thoroughly answer that question.
BY MS. BARNHART:
Q. So you cannot, sitting here today, answer that question?
A. Without --
MS. O'NEILL: Objection. Asked and answered.
THE WITNESS: Without having the chance to, again, sit down thoroughly, read the article, I cannot appropriately answer that question.
BY MS. BARNHART:
Q. Okay. Then you -- the next sentence in paragraph 21 of your rebuttal report says:
"I also cited evidence of other researchers in the field describing this potential dopamine mechanism as applied to social media addiction and there has been some empirical research on this general topic."
Do you see that?
A. I'm catching up here.
I see that.
Q. Okay. And you again cite, to support that statement, this Westbrook 2021 article; correct?

A. Correct.
Q. And, again, that article did not measure any dopamine release relating to individuals with social media addiction; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: So to fully and properly answer that question, I'd have to jog my memory of the study and review it.
BY MS. BARNHART:
Q. Okay. So after the next break, you can let me know if that jogged your memory at all.
And am I correct, Dr. Zicherman, that this rebuttal report that we're looking at -- this is dated July 30th, 2025; right?
A. I believe that is the correct date.
Q. Okay. So you submitted this report less than a month ago; correct?
A. Correct.
Q. And presumably you reviewed the materials that you cite in support for the statements that you make in this report at or around the time that you submitted it; right?
A. Correct.
Q. And you don't recall, less than four weeks later, why you cited these particular studies or

what they say?
MS. O'NEILL: Objection. Form.
THE WITNESS: I believe I've referenced lots of studies and, again, accurately answered questions about specific studies.
I would want a chance to review those studies carefully before answering specific questions related to them.
BY MS. BARNHART:
Q. Would it surprise you to learn that, in fact, you referenced less than 10 academic studies in your rebuttal report?
MS. O'NEILL: Objection. Form.
BY MS. BARNHART:
Q. I'm talking about actually cite in your rebuttal report.
A. As far as books and academic papers in the rebuttal report, it appears there are less than ten citations.
Q. Let me ask you about the next sentence in paragraph 21, where you say -- I think this is where you were going earlier.
You write:
"However, establishing the role of dopamine in social media addiction is

not necessary for my opinion that social media use is a substantial contributor to youth mental health issues. My opinion holds regardless of the specific neurological or psychological mechanisms by which social media use impacts mental health."
Is that correct?
A. Correct.
Q. So are you -- do you plan to offer an opinion in this case about the specific neurological or psychological mechanism by which you believe social media use impacts mental health?
A. That is part of my opinion in the initial report; so yes.
I also would add again that I've been saying that it is not a substantial part of what led to my opinion on the topic.
Q. Yeah, I'm just trying to understand if it has any part in your opinion on the topic.
So whether or not it is true that dopamine plays a role in social media addiction, you would continue to hold your opinion that Instagram causes social media addiction through dopamine release?

MS. O'NEILL: Objection. Form.
THE WITNESS: It's important to understand, sure, the mechanism this is working through. Again, regardless of what the specifics of the mechanism are, that is not going to affect the patients that are showing up and needing significant treatment for social media addiction concerns.
BY MS. BARNHART:
Q. If a jury were to determine that use of Instagram has no impact on development of purported social media addiction because the jury rejects your opinions about this mechanism, then how does the rest of your opinion hold that Instagram causes social media addiction and harm?
MS. O'NEILL: Objection. Form. Calls for speculation.
THE WITNESS: A jury can choose to agree with me or not. That's not going to affect the patients showing up at my office and having to treat them for a very serious condition, which, again, is social media addiction.
BY MS. BARNHART:
Q. It could be -- as we've discussed earlier, it could be that things other than Instagram features are causing the social media addiction you

claim to see in your clinic; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: It's a substantial part of what I believe is causing the social media addiction concerns.
BY MS. BARNHART:
Q. And what I'm asking you is if this mechanism of dopamine release caused by Instagram features doesn't hold as a matter of science, then what is the mechanism that you believe leads Instagram features to cause addiction or harm?
MS. O'NEILL: Objection. Form.
THE WITNESS: I believe it does hold. There is evidence about this in literature. I've cited references in relation to that.
Again, I will say that, regardless of the mechanism of action, it's not going to affect the patients that are showing up at my office every day.
BY MS. BARNHART:
Q. Do you have any opinions on any other possible mechanism -- causal mechanism aside from this dopamine release theory?
MS. O'NEILL: Objection. Form.
BY MS. BARNHART:
Q. Let me rephrase because it's not very

clean.
Do you have any opinion about any other possible mechanism by which use of Instagram causes addiction or mental health harm aside from your dopamine release theory?
MS. O'NEILL: Objection. Form.
THE WITNESS: The dopamine release theory is the primary mechanism that I am opining on.
And, again, I will say, regardless of the mechanism specifics, it's not affecting the patients that are coming into my office.
BY MS. BARNHART:
Q. Dr. Zicherman, I understand what you're saying about it not affecting the patients, but I'm talking about this causal mechanism. That's what I'm trying to understand. And I did not get a clean answer to my question.
You said, "The dopamine release theory is the primary mechanism that I'm opining on."
Does that mean you have no other mechanisms -- you have no other opinions about any other mechanism?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, that's my understanding of how an app like Instagram leads to addiction

concerns in a youth.
BY MS. BARNHART:
Q. Okay. So if the jury or judge rejects your dopamine release mechanism as a matter of science, you will not testify at trial about any other possible causal mechanisms? That's what I hear.
MS. O'NEILL: Objection. Form. Calls for speculation.
THE WITNESS: That's -- and I'm not quite sure how to answer that hypothetical. I'm not sure what would happen at trial. I am opining on this causal mechanism.
BY MS. BARNHART:
Q. Okay. I'm just -- I'm entitled to know what your opinions are now. I don't have to wait until trial to figure out what those are going to be.
So I'm asking you do you have any opinions on any other causal mechanisms aside from your dopamine release theory?
A. I believe that's the theory that I'm working on that led to my -- in part, my opinion that I presented.
Q. Okay. So no -- no, you do not have any opinions on any other causal mechanisms that you

intend to present as an expert in this case?
A. At a molecular level, I don't believe there are plans to present other areas of a potential causal mechanism beyond the dopamine response pathway.
Q. And I'm talking about at any level.
Do you have any expert opinions on any other potential causal mechanisms aside from your dopamine release theory?
A. Well, I've talked about the app itself as part of a causal mechanism leading to harm. So I would have to include that beyond just the dopamine mechanism that I report on.
Q. How does -- in your view -- because I don't see this explained anywhere in your report -- how do you believe that the app itself causes harm aside from through this dopamine release mechanism?
A. Yeah, so I have families, patients that come in every week that I'm in my office who have significant concerns about -- about social media addictions.
These patients, these -- well, the families will come in often believing that social media use is destroying the lives of their children, their teenagers, their adolescents.

Is that answering your question?
Q. No, but --
A. Okay.
Q. -- if that's your answer, that's fine.
Is that a complete answer to my question?
A. You could restate the question again -- I can see if I would add on to it -- if you want.
Q. Aside from hearing from -- aside from your discussions with patients and families and your belief in this dopamine release theory, do you have any opinions about any other mechanisms of harm for Instagram addiction or mental health concerns?
MS. O'NEILL: Objection. Form.
THE WITNESS: I think my clinical work and my understanding of dopamine and its interaction with the app are primary considerations of my opinion.
BY MS. BARNHART:
Q. I'm asking are they the entire considerations as opposed to the primary considerations?
Can you think of any other mechanisms?
A. Well, we've talked about what I see clinically. We've talked about the dopamine mechanisms. We've talked about features of the

actual app and design that are potentially causal.
I think that summarizes pretty well my opinions.
Q. Do you agree with me, Dr. Zicherman, that natural rewards do not affect the brain in the same way that chemical rewards do?
MS. O'NEILL: Objection. Form.
THE WITNESS: I believe there's enough evidence out there suggesting that there is a shared mechanism of both -- I believe you're referencing substance addictions and, potentially, behavioral addiction concerns.
BY MS. BARNHART:
Q. Do you agree that natural rewards such as eating, drinking, and socializing are necessary for survival and maintenance of a species?
A. Of course.
Q. Do you agree that substances of abuse hijack the mesolimbic system by offering a reward without any obvious biological function?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, I'm not sure that's necessarily true. Someone can abuse opioids, for instance, but also be prescribed an opioid for pain.
///

BY MS. BARNHART:
Q. But do you agree with me that opioids as well as other substances of abuse chemically circumvent satiation and increase dopamine levels artificially?
MS. O'NEILL: Objection. Form.
THE WITNESS: That is how many substances of abuse do work.
BY MS. BARNHART:
Q. And you understand that natural rewards do not have those same effects; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: They might affect dopamine levels, but -- they might affect dopamine levels, but in different nonconcerning ways.
BY MS. BARNHART:
Q. You're not aware of any evidence that social media use drives dopamine responses that are any stronger than any other natural social activity does; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: I mentioned before, you can ask a neuroscientist about the measurement of dopamine levels.
///

BY MS. BARNHART:
Q. Meaning you yourself are not aware of any evidence that using social media drives stronger dopamine responses than any other natural social activity; correct?
MS. O'NEILL: Same objection.
THE WITNESS: I believe you're referencing measurement of levels. That would be area of expertise of a neuroscientist.
BY MS. BARNHART:
Q. And that's outside your area of expertise; correct?
A. Sure. Measurement of dopamine is outside my scope of practice.
Q. So you have no basis, sitting here today, to opine that social media drives stronger dopamine responses than being around friends in person; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: I do not measure dopamine levels in my clinical practice. I do not know anyone who does that.
BY MS. BARNHART:
Q. Did you understand my question, Dr. Zicherman?

A. I believe I did, but please repeat or rephrase.
Q. You have no basis, sitting here today, to opine that social media drives stronger dopamine responses than socializing with friends in person; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, I believe it does drive concerning levels of dopamine use. I'm not here to opine on the specific levels and ways that dopamine ends up cascading throughout the brain in response to rewards.
BY MS. BARNHART:
Q. What is the basis for your belief that social media drives concerning levels of dopamine use?
A. I have encountered many studies that have indicated that that is the mechanism.
Q. Can you name one such study?
A. Again, I would have to carefully review the studies to name a specific study.
Q. You believe that there's a study cited in your report that concludes that social media drives concerning levels of dopamine?
A. I believe that that is a topic discussed in

literature that I've cited in the report.
But, also, there are studies that I'm sure are not in my report that have also detailed that as a mechanism.
Q. But you -- sitting here right now, you cannot name me one such study; correct?
MS. O'NEILL: Objection. Asked and answered.
THE WITNESS: I would have to carefully review the literature to accurately answer that question.
BY MS. BARNHART:
Q. So you're convinced that such a study exists, but you can't actually identify one for me right now?
MS. O'NEILL: Objection. Form.
THE WITNESS: I've come across lots of studies over the years. To jog my memory and accurately answer that question, I would have to review the literature.
BY MS. BARNHART:
Q. Okay. Well, then I assume you won't show up at trial saying you've got such a study since you can't identify one for me now; correct?
MS. O'NEILL: Objection. Form.

THE WITNESS: I have stated that, regardless of the actual mechanism of action, it's not going to change, and it doesn't change, the fact that these patients are showing up at my office very sick.
BY MS. BARNHART:
Q. That's not my question, Dr. Zicherman.
I'm talking about literature that you claim exists to show that social media drives concerning levels of dopamine.
You're not prepared to identify one for me today; correct?
MS. O'NEILL: Objection. Asked and answered.
THE WITNESS: Yeah, I think you're asking a question that I would have to carefully review all my citations again to answer your, I think, pretty specific question. And there are also studies that are not, surely, in the report that are on that topic.
BY MS. BARNHART:
Q. You're just speculating on that because you -- you cannot identify one for me right now; so you're just speculating that they exist. Right?
MS. O'NEILL: Objection. Form.

THE WITNESS: I believe I've come across literature of that nature; but, again, that's not the primary basis for my opinion.
BY MS. BARNHART:
Q. In paragraph -- well, let me just ask you this way.
Is there any such thing medically as a dopamine fast?
MS. O'NEILL: Objection. Form.
THE WITNESS: I believe you can consider that a form of a medical intervention, the idea of taking a dopamine fast, which would be in relation to detoxing from a social media platform or potentially a substance.
BY MS. BARNHART:
Q. It's not possible for a human being to inhibit dopamine release in their brain; correct?
A. Not in its entirety. I don't believe that is how dopamine works.
Q. Do you understand the term "fast" means completely doing away with whatever it is that you're fasting from?
A. I think the clinical application of a dopamine fast is not to stop eating, not to engage in romantic relations; it's in relation to fasting

from a concerning addiction such as a social media addiction, the other technology addictions too, or a substance addiction.
Q. And you agree with me that a complete fast from dopamine would be unhealthy; correct?
A. If that involves not eating and not engaging in other activities to preserve life, then sure. In theory, sure.
Q. A complete absence of dopamine would not be a healthy person; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: Again, I think I explained the clinical application of a dopamine fast is not -- don't starve yourself, don't engage in other potentially -- potential important activities to sustain your life.
The clinical application of the idea of a dopamine fast is abstain from a concerning substance or a potentially behavioral addiction concern.
BY MS. BARNHART:
Q. Are you aware of any study that has measured how much less dopamine is released in a human brain as a result of a technology dopamine fast, for example?
A. I would have to review the literature to

see if those studies exist.
Q. So, sitting here today, you don't actually know that dopamine levels in the brain would go down were someone to engage in a technology fast, for example?
MS. O'NEILL: Objection. Form.
THE WITNESS: I think the understanding of a dopamine cascade triggered by social media use is that levels would likely change if someone suddenly abstained from use or even slowly abstained or changed their use levels.
BY MS. BARNHART:
Q. You have no empirical evidence to support that claim; correct?
A. I'm not currently referencing empirical evidence to support that.
Q. You don't know that whatever dopamine is released by social media use wouldn't just be replaced by some other dopamine-releasing activity that the person chooses to engage in?
MS. O'NEILL: Objection. Form. Calls for speculation.
THE WITNESS: There can be the concept of cross-addictions. We see that.
///

BY MS. BARNHART:
Q. You don't know -- let's say that one of your patients did an Instagram fast and they restricted their use of Instagram for a week.
You don't know that they wouldn't receive the same amount of dopamine that they received on Instagram from interacting with their family and friends in real life; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: I'm not measuring dopamine in my practice; so that makes that question difficult to answer.
BY MS. BARNHART:
Q. Okay. So you're not talking about a dopamine fast; you're just talking about restricting use of Instagram or other technologies; right?
A. I think you're asking about restricting Instagram or other technologies? Maybe you can rephrase or repeat the question.
Q. You keep talking about dopamine and dopamine fasts and how that's necessary to treat social media addiction.
But you can't testify truthfully today that you know that restricting use of Instagram would actually reduce dopamine levels in someone's brain?

MS. O'NEILL: Objection. Form. Mischaracterization.

THE WITNESS: Well, again, I'm not in a research lab measuring the dopamine levels of my patients. It is my understanding, though, that this is the mechanism through which dopamine works.

BY MS. BARNHART:

Q. Even though you don't have a neuroscience understanding of dopamine release or how dopamine works; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: I have an understanding that I believe is acceptable of a medical doctor with a background in psychiatry -- child and adolescent psychiatry and addiction psychiatry.

BY MS. BARNHART:

Q. You would want to talk to a neuroscientist to really understand how dopamine is released in the -- released in the brain and how dopamine works; correct?

MS. O'NEILL: Objection. Form. Mischaracterization.

THE WITNESS: A neuroscientist, I would suspect, would have a good understanding of the mechanisms of dopamine, at least the nuances of how

it works throughout the body. It is complicated.

You know, I have said before, reference a neuroscientist if you want to know all the nitty-gritty details of how dopamine works throughout the body.

BY MS. BARNHART:

Q. You would expect that someone with formal training in neuroscience would have a better understanding of the mechanisms of dopamine than you do; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: Someone with a PhD in neuroscience might have a better understanding of the mechanisms of dopamine.

BY MS. BARNHART:

Q. Well, someone with any formal training in neuroscience would have a better understanding of the mechanisms of dopamine than you, right, because you don't have any formal training in neuroscience?

MS. O'NEILL: Objection. Form.

THE WITNESS: I do not have a PhD in neuroscience.

BY MS. BARNHART:

Q. You don't have any -- any degree in neuroscience; right?

A. I have a medical degree. I do not have a PhD in neuroscience.

Q. You don't consider yourself any kind of neuroscience expert; right?

A. I don't call myself a neuroscientist; I call myself a medical doctor.

Q. Do you agree, Dr. Zicherman, that social media can have benefits for teenagers?

A. This is a spectrum. I'm sure there's some circumstances where it's not always harmful.

Q. Let me ask my question again.

Do you agree, Dr. Zicherman that social media can have benefits for teenagers?

MS. O'NEILL: Objection. Asked and answered.

THE WITNESS: There can be some situations where potentially there could be some benefit; but what I see, and my belief, is that the opposite is what is typically true.

BY MS. BARNHART:

Q. Well, teenagers probably wouldn't come see you if they were receiving life-changing benefits from using social media; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: Well, live-changing could be

good or problematic, and you might have to clarify that question for me.

BY MS. BARNHART:

Q. Do you think a life-changing benefit could be a bad thing?

A. What do you mean by -- okay. Life-changing benefit. Okay. That might have been how you phrased it at first.

A life-changing -- can you repeat the question for me.

Q. Teenagers probably wouldn't come to see you if they were receiving life-changing benefits from using social media; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: If they're benefiting from the app, I'm probably not going to see them in clinic, although this could be a matter of perspective. And a child or teenager might believe they were benefiting, and a parent might believe that the app is causing harm. That could happen.

BY MS. BARNHART:

Q. Nowhere in your report do you talk about the potential benefits of using Instagram; correct?

A. I'd have to reference my report. I don't believe I really discuss potential benefits as I

don't see those in my clinical practice.
Q. And you haven't otherwise done any investigation of the potential benefits of Instagram use for teenagers; right?
A. Can you clarify what you mean by "further investigation"?
Q. I asked if you've done any investigation of the potential benefits of Instagram use for teenagers.
A. What do you mean by "investigation"?
Q. Have you considered the potential benefits of Instagram for teenagers when forming your opinions in this case?
A. My opinions are based on years of clinical practice working with patients that I see have lives that can be devastated by social media use.
Q. And so you have no opinion -- because you don't have any experience with them, you don't have any opinion on teenagers whose lives can be changed for the better by social media use; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: There can be circumstances where, potentially, a teenager is not harmed and may have certain forms of benefit. This is a spectrum.
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BY MS. BARNHART:
Q. Do you agree that digital platforms, including Instagram, provide an important space for self-discovery and expression for LGBTQ+ youth?
MS. O'NEILL: Objection. Form.
THE WITNESS: That could potentially be true.
BY MS. BARNHART:
Q. Do you agree that Instagram can be life-saving for certain marginalized youth?
MS. O'NEILL: Objection. Form.
THE WITNESS: That can potentially be true in certain limited situations and scenarios.
BY MS. BARNHART:
Q. Why do you say "certain limited situations and scenarios"?
A. Well, I think you brought up a scenario where it could potentially not cause harm.
Q. I didn't ask you if it could not cause harm; I asked you do you agree that Instagram can be life-saving for certain teenagers?
MS. O'NEILL: Objection. Form.
THE WITNESS: That is not the case with the patients that I work with. In theory, maybe there's a teen out there who has received some form of

benefit from being on the app.
Again, this is a spectrum. I do recognize that.
BY MS. BARNHART:
Q. But you advocate to take away that lifeline from that teenager; right?
MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: Sometimes.
BY MS. BARNHART:
Q. You would take away a lifeline from a teenager if it happened to be in the form of Instagram?
MS. O'NEILL: Same objections.
THE WITNESS: In the scenario that you mention where it could be potentially, in theory, a helpful tool, I'm not going to take away something from someone who is finding help or benefit.
Again, that is, I believe, not what typically -- well, I can say that is not the case with the clinic population that I am working with.
BY MS. BARNHART:
Q. Well, you have recommended to parents in public webinar settings that parents not allow their children any access to social media platforms.

MS. O'NEILL: Objection. Form.
BY MS. BARNHART:
Q. Correct?
And by "children," I mean teenagers.
Have you or have you not recommended to parents that they not allow their children and teenagers any access to social media platforms?
MS. O'NEILL: Objection. Form.
THE WITNESS: There are certain circumstances where I do believe it is unsafe for certain individuals to use a social media platform like Instagram.
BY MS. BARNHART:
Q. But you also acknowledge that there are circumstances where it is healthy and life-saving for certain individuals to use a social media platform like Instagram?
MS. O'NEILL: Objection. Form.
THE WITNESS: You're providing hypotheticals.
In reality, of course -- again, this is a spectrum -- and there are going to be some individuals who might potentially receive benefit.
BY MS. BARNHART:
Q. Okay. So you're not aware of any situation

where a trans 14-year-old girl in the middle of Wyoming might view Instagram as a life-saving thing?

MS. O'NEILL: Objection. Form. Incomplete hypothetical. And calls for speculation.

THE WITNESS: Can you provide the example again.

BY MS. BARNHART:

Q. Yes. My hypothetical was a transgender 14-year-old girl living in the middle of Wyoming in a conservative community that tells her, hey, you're transgender; you should go kill yourself.

You think Instagram might be a lifeline for that girl?

MS. O'NEILL: Same objections.

THE WITNESS: I don't know. I don't work with patients in Wyoming like that. But, potentially -- again, I'm not here to say that every situation, every teenager who is on the platform is going to have harms.

BY MS. BARNHART:

Q. And you can't -- you can't envision a situation where being on the platform could be life-saving?

A. Well, I think you've provided an example where, theoretically, maybe that person has -- is

not being harmed and has some benefit for being on the app. But I think these scenarios are pretty limited. You should recognize them, though.

Q. Okay. But you don't recognize them in your public statements to parents when you tell parents, "Keep your kids off social media, keep your teenagers off social media; they will be completely fine"; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: And I'm not sure what you're referencing exactly. That would be helpful to have full context.

BY MS. BARNHART:

Q. I'm referencing the webinar from June 26th of this year that you just recently added to your CV.

MS. O'NEILL: And I'll object that he doesn't have that before him and can't look at it.

THE WITNESS: I can't really answer a question without looking at the video.

BY MS. BARNHART:

Q. So this was exactly two months ago, June 26th, and you can't remember medical advice that you provided to parents two months ago?

MS. O'NEILL: Objection. Form.

Argumentative.

THE WITNESS: Two months ago, I think, is a substantial amount of time, and I can't recall the specifics of what I stated during that webinar. I'm happy to discuss if you want to play it.

BY MS. BARNHART:

Q. Let's talk about some other potential benefits of social media.

Do you agree that social media use supports social connection and positive mental health?

MS. O'NEILL: Objection. Form.

THE WITNESS: I believe that the opposite holds more true; but, again, I'm here to say that there is a spectrum of teenagers and presentations. I'm working with a very concerning, problematic population.

BY MS. BARNHART:

Q. Do you agree that using social media can help combat isolation?

A. I believe it is more likely to serve to compound and increase isolation in most teenagers using the app.

Q. You have not in your clinic served most teenagers using the app; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: I have not served?

BY MS. BARNHART:

Q. Correct. You just -- you just testified you believe it is more likely to serve to compound and increase isolation in most teenagers using the app, but you don't have any basis to opine on what most teenagers using the app experience; right?

MS. O'NEILL: Objection. Form.

THE WITNESS: I'm sorry. Is there any way to address this glare here? I'm blinded.

MS. BARNHART: Let's go off the record.

THE VIDEOGRAPHER: Stand by. The time is 6:49 p.m., and we're going off the record.

(Recess taken.)

THE VIDEOGRAPHER: The time is 6:50 p.m., and we're back on the record.

BY MS. BARNHART:

Q. So, Dr. Zicherman, if I'm understanding you correctly -- well, hold on one second.

So you just testified you believe it is more likely that Instagram serves to compound and increase isolation in most teenagers than to not; is that correct?

A. I believe that is, the best of my estimation, most likely.

Q. And what's that based on?
A. Based on my understanding of working with my clinic population and review of the mechanism of action of the app and also following the -- following many materials related to social media use, and teenagers and harms over the years as a practicing physician.
Q. Can you cite to me any empirical study of most -- of all teenagers using the Instagram app that found that most of them, Instagram use makes isolation worse rather than improving isolation?
MS. O'NEILL: Objection. Form.
THE WITNESS: I would have to carefully review the available literature to appropriately answer that question.
BY MS. BARNHART:
Q. And you have not done that and are not prepared to testify about that here today; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: I'm prepared to testify about my opinion and the references in my opinion.
BY MS. BARNHART:
Q. And you don't have any such references in your opinion that indicate social media makes things worse for teens in terms of isolation than better;

correct?
A. Well, I would have to carefully review even my citations to see if that specific phrase -- to jog my memory if that was in any of my references.
Q. Earlier today we were talking about prevalence. Do you have any data or other evidence indicating that the prevalence of teens who benefit from using social media is less than the prevalence of teens who are harmed by using social media?
MS. O'NEILL: Objection. Form.
THE WITNESS: Can you repeat the question, please.
BY MS. BARNHART:
Q. Do you have any data or other evidence indicating that the prevalence of teens who benefit from using social media is less than the prevalence of teens who are harmed by using social media?
MS. O'NEILL: Same objection.
THE WITNESS: Again, I'm here to comment on my report, references in my report. There might be other references out there regarding your specific question. I would have to review the literature to appropriately answer that.
BY MS. BARNHART:
Q. Right. I'm only talking about what you

know sitting here today. I'm not interested in what you might be able to go find out if you actually conducted a thorough literature review.
I'm asking you, sitting here today, whether it's in your report or in your head or otherwise, do you have any data or other evidence indicating that the prevalence of teens who benefit from using social media is less than the prevalence of teens who are harmed by using social media?
MS. O'NEILL: Objection. Form.
THE WITNESS: Yeah, I think you're asking a narrow question.
To answer that question, I would need to review the literature to provide you an appropriate answer.
BY MS. BARNHART:
Q. So you cannot -- so you do not have an answer to that question today; correct?
A. I think -- the same. My answer is that I think you're asking a narrow question. And to answer that, I would have to carefully review the literature.
Q. And sitting here today, you can't testify truthfully and confidently that more teens are harmed by Instagram than benefited by using

Instagram?
MS. O'NEILL: Objection. Form.
THE WITNESS: Well, I believe that to be true, that more are harmed. And that is based off of, again, my clinical experience and review of thousands of pieces of material over the past several years in relation to social media and potential harms.
MS. BARNHART: All right. Well, that's in contradiction with your testimony earlier today. But we'll let the record speak for itself.
Dr. Zicherman, I don't have any further questions for now.
I can pass the witness.
And I may have additional questions if your counsel asks you any.
MS. O'NEILL: Should we just go off the record?
THE VIDEOGRAPHER: Stand by.
The time is 6:55 p.m., and we're going off the record.
(Recess taken.)
THE VIDEOGRAPHER: The time is 7:04 p.m., and we are back on the record.
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EXAMINATION

BY MS. O'NEILL:

Q. Good evening, Dr. Zicherman. I just have a few questions for you.

Do you remember speaking earlier today with Meta's counsel about your clinic template and notes?

A. I do.

Q. How often do you consult your clinic notes as part of your clinical work?

A. I like to reference my notes on a daily basis to prepare for working with patients that day.

Q. And how often do you consult your clinic template as part of your clinical work?

A. Well, again, it would be daily. It's really an integrated sort of function along with our notes. So I have to consult both on a daily basis to work with my patients.

Q. Were there any differences in how often you consulted your clinic notes and template during the period when you were drafting your expert reports and periods when you were not?

MS. BARNHART: Objection. Form.

THE WITNESS: There were no differences.

BY MS. O'NEILL:

Q. Now, as you discussed with Meta's counsel

earlier, your clinic template and notes are not on your materials considered list; is that correct?

A. Correct.

Q. Why not?

A. I did not need to rely on that information to form my opinion.

Q. Dr. Zicherman, do you remember discussing residential treatment programs with Meta's counsel?

A. Yes.

Q. And just for clarity, have you ever recommended any patients for a residential treatment program?

A. I have recommended patients for residential treatment.

Q. And what kinds of mental health conditions have those patients suffered from?

A. These tend to be patients who have essentially failed lower levels of care, and they -- also, in order for insurance to pay for residential programs, they do have to have a qualifying DSM diagnosis, which could be severe major depressive disorder, severe anxiety, OCD, psychotic disorder. It could be bipolar, something that attempts were made at treatment and failed at lower levels.

Q. And have you recommended patients with

social media use disorders for residential treatment?

A. Yes. I have recommended that. Those patients do typically, again, need to have that dual diagnosis -- sorry -- that DSM diagnosis in order to qualify for insurance to pay for treatment.

But there have been instances where I have recommended residential treatment for concerning social media use.

MS. O'NEILL: That's all the questions I have for you.

THE VIDEOGRAPHER: Stand by.

The time is 7:07 p.m., and we're going off the record.

(Brief discussion held off the stenographic record.)

THE VIDEOGRAPHER: The time is 7:08 p.m., and we are back on the record.

EXAMINATION

BY MS. BARNHART:

Q. Dr. Zicherman, you just testified that you consult your clinic notes and clinic template on a daily basis as part of your clinical work; correct?

A. Well, you have to look at the records to treat patients; so yes.

Q. Fair to say that your clinic notes and clinic template are inextricable from your clinical experience?

MS. O'NEILL: Objection. Form. Mischaracterization.

THE WITNESS: I wouldn't agree with that.

BY MS. BARNHART:

Q. Do you have any clinical experience separate and apart from what's in those clinic notes and clinic template?

MS. O'NEILL: Same objections.

THE WITNESS: Clinical experience, I believe, can also include knowledge obtained through materials reviewed and discussions with other clinicians and providing presentations.

BY MS. BARNHART:

Q. But in this case the clinical experience you're relying on to -- as the basis for your opinions is based on your daily review of the clinic template and your clinic notes as well as everything else you just listed; correct?

MS. O'NEILL: Objection. Form. Mischaracterization.

THE WITNESS: My opinion is not based on my patient records or template.

BY MS. BARNHART:
Q. It's based on your daily review of your clinic template and notes because that is part of your clinical experience; correct?
MS. O'NEILL: Same objections.
THE WITNESS: I believe I've answered that question. My opinion is not based off of my -- my clinical records or template.
BY MS. BARNHART:
Q. If you did not look at your clinic template or clinical notes at all, would you have any clinical experience on which to base the opinions that you offer in this case?
MS. O'NEILL: Objection. Form. Calls for speculation.
THE WITNESS: Can you please repeat the question.
BY MS. BARNHART:
Q. You testified earlier that you have to look at your clinic template and clinic notes every day in order to effectively treat your patients; correct?
A. Correct.
Q. So without that clinic template and without those clinical notes, you have no clinical knowledge

or clinical experience on which to base your opinions in this case; correct?
MS. O'NEILL: Same objections. And asked and answered.
THE WITNESS: I believe I've answered that question.
BY MS. BARNHART:
Q. And you're not limiting the basis for your opinions on the clinical experience that you have separate and apart from your daily review of your clinic notes and clinic template; correct?
MS. O'NEILL: Objection. Form.
THE WITNESS: I found that question confusing.
BY MS. BARNHART:
Q. I'll say it again.
In this case, you're not limiting the basis for your opinions to the clinical experience that you have separate and independent from your daily review of your clinic notes and clinic template; correct?
MS. O'NEILL: Same objection.
THE WITNESS: I would need that rephrased.
BY MS. BARNHART:
Q. I'm going to try it one more time. Listen

carefully.
In this case, you're not limiting the basis for your opinions to the clinical experience that you have separate and independent from your daily review of your clinic notes and clinic template; correct?
MS. O'NEILL: Same objection.
THE WITNESS: I think you're going to have to rephrase that question for me.
BY MS. BARNHART:
Q. You can't answer my question?
A. I find it confusing. I'm sorry.
Q. Okay. Well, then let's break it down for you.
You have clinical experience that is based on your daily review of your clinic notes and clinic template; correct?
MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: Yeah, I work with patients daily, and I have to review my records to work with my patients.
BY MS. BARNHART:
Q. And that daily review forms a prominent part of your clinical experience; correct?

MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: I believe I've explained this and answered this; but in order to work with patients, I have to review their records.
BY MS. BARNHART:
Q. Okay. You would not be able to operate your clinic without your daily review of these clinical notes and clinical template; correct?
A. Sure --
MS. O'NEILL: Objection. Form.
THE WITNESS: A clinic cannot operate without review of patient records.
BY MS. BARNHART:
Q. Okay. And in this case you are basing your opinions, at least in part, on the clinical experience you have as a result of reviewing your patient records on a daily basis; correct?
MS. O'NEILL: Objection. Form. Mischaracterization.
THE WITNESS: Again, I believe I've stated this, but my opinion is not based off of my clinical notes or template.
BY MS. BARNHART:
Q. So you are saying that -- that was my

question earlier.

You are limiting the basis for your opinions in this case to clinical knowledge and clinical experience you have separate and independent from your daily review of clinical notes and your clinic template?

MS. O'NEILL: Objection. Form. Mischaracterization.

THE WITNESS: Again, I find that a confusing question.

BY MS. BARNHART:

Q. Well, I find your testimony confusing, Dr. Zicherman. So let's try one more time.

In this case, you're offering opinions on the basis of your clinical knowledge and clinical experience; correct?

A. Correct.

Q. And a good part of your clinical knowledge and clinical experience is derived from your daily review of your clinic template and your clinic notes; correct?

MS. O'NEILL: Objection. Form.

THE WITNESS: I am not basing my opinion off of what is in my patient records or the template schedule that I have.

BY MS. BARNHART:

Q. But you have not excluded the information that is in your head that you have -- that has come to your head as a result of that daily review of your clinic notes and template? You're not excluding that from the basis for your opinions in this case; right?

A. Can you repeat the question.

Q. Do you agree with me that a good part of your clinical knowledge and clinical experience is derived from your daily review of your clinic template and your clinic notes?

MS. O'NEILL: Objection. Form.

THE WITNESS: Again, I would say that I have to review and write records on my patients as part of my day-to-day responsibilities. But that is not a part of what went into my opinion.

BY MS. BARNHART:

Q. All of your clinical knowledge and clinical experience forms the basis of your opinions in this case; correct?

A. I did not include my template or patient notes as part of my references that led to my opinion.

Q. All right. You've got to answer my

questions if we're going to finish.

The basis of your opinions in this case is the entirety of your clinical knowledge and clinical experience; correct? So you're not limiting that in some way?

A. A global aspect of my clinical knowledge, which involves, you know, beyond working with patients.

Q. And also involves working with patients; right? That is part of the basis of your opinions in this case; correct?

A. Well, I have to work with patients to form an opinion about -- about the work I do; but, again, I did not have to reference specific records or schedule templates to form my opinion.

MS. BARNHART: Okay. No further questions. Thank you.

THE VIDEOGRAPHER: Stand by.

This concludes the deposition of Dr. Bradley Zicherman.

The total time on the record for defendants is 6 hours and 51 minutes.

The total time on record for plaintiff is 2 minutes and 51 seconds.

The time is 7:16 p.m., and we are going off

the record.

(Time: 7:16 p.m.)

---oOo---

I, JENNY L. GRIFFIN, hereby certify:

That I am a certified shorthand reporter in and for the County of Alameda, State of California;

Prior to being examined, BRADLEY ZICHERMAN, MD, the witness named in the foregoing deposition, was by me duly sworn to testify to the truth, the whole truth, and nothing but the truth; that said deposition was taken pursuant to notice at the time and place therein set forth, and was taken down by me in stenotype and thereafter transcribed by means of computer-aided transcription, and that said deposition is a true record of the testimony given by the witness.

I further certify that I am neither counsel for nor related in any way to any party to said action, nor otherwise interested in the outcome thereof.

In witness whereof, I have hereunto subscribed my name September 9, 2025.

_____

JENNY L. GRIFFIN, CSR #3969

Certified Shorthand Reporter

DECLARATION UNDER PENALTY OF PERJURY

Case Name: Social Media Litigation/CA MDL 3047 (People of the State of California v. Meta)

Name of Witness: BRADLEY ZICHERMAN, MD

Date of Deposition: August 27, 2025

Job No.: 7553548

I, BRADLEY ZICHERMAN, MD, hereby certify under penalty of perjury under the laws of the State of California that the foregoing is true and correct.

Executed this _____ day of _____, 2025, at _____.

_____

BRADLEY ZICHERMAN, MD